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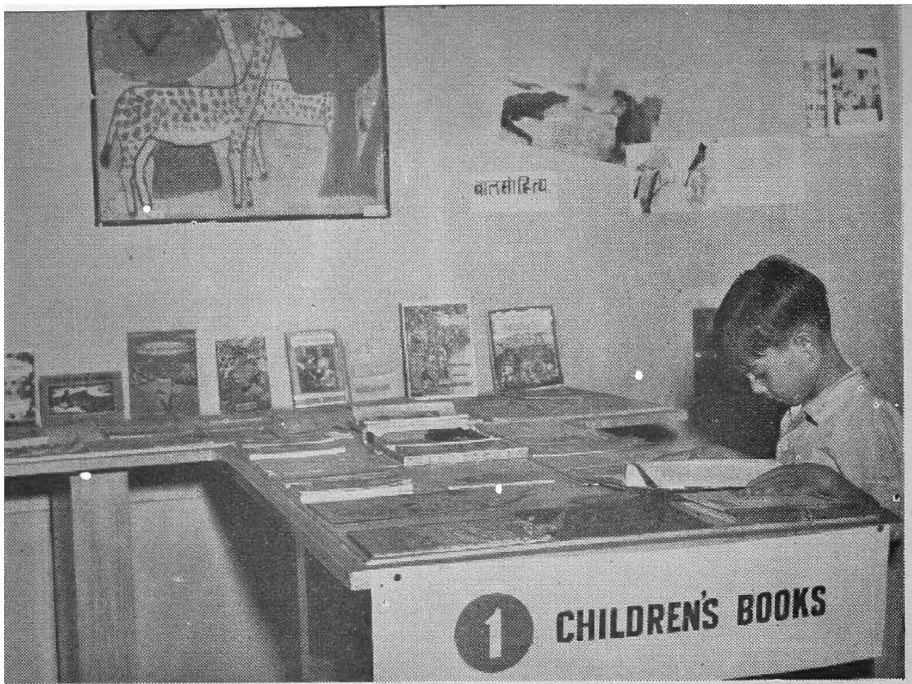
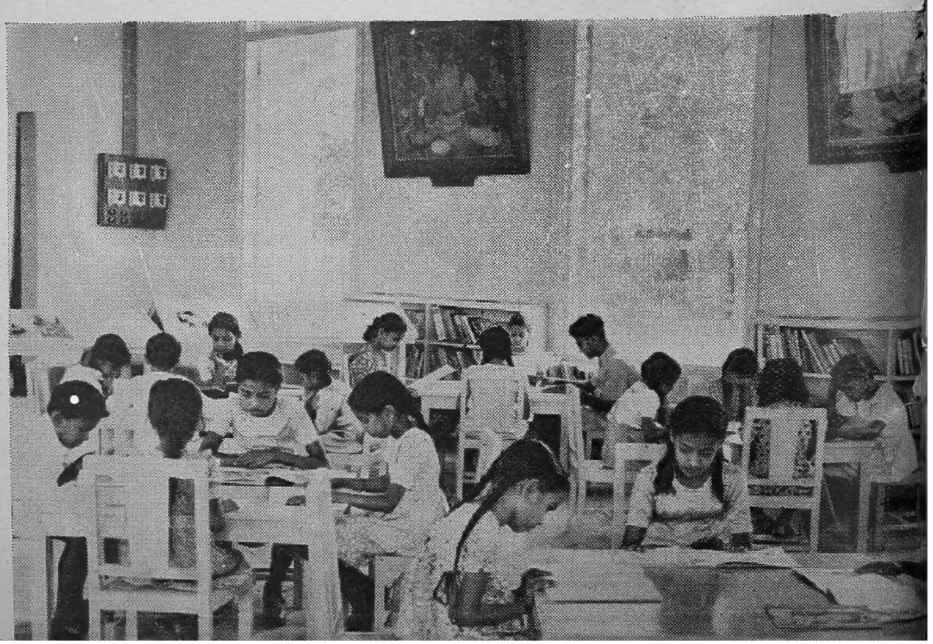


At the Exhibition of Books

BOOKS FOR CHILDREN



Library and Reading Room at the Bal Bhawan, Bombay

This Issue

In recent years, after Independence, a number of States in India have taken measures to nationalise textbooks, partially or wholly, with the idea of improving the quality of textbooks and making them available at a reasonable price. The Secondary Education Commission had also expressed concern over the deteriorating standard of textbooks in the country and suggested that the Central and State Governments devote serious attention to this problem. However, the policy of textbook nationalisation adopted by some of the States has had a mixed reception. While the supporters of this policy claim that nationalisation has justified itself, there are many who think that it has neither improved the quality of textbooks nor in any significant measure helped to bring down their prices. Perhaps it is too early yet to pronounce a definite opinion. In this issue we have two articles on this subject—"State Nationalisation of Textbooks" and "The State and the Textbook". The first article describes the experience of two States who have ventured into this field and is written by persons who are closely connected with their State's policy of nationalisation. The second article is by the Principal of a well-known school in Delhi, giving an educator's viewpoint on the subject. There is also one article on textbook selection procedures in India.

"The Commonwealth Conference Diary" by K. G. Saiyidain, Secretary to the Ministry of Education, gives his impressions of the Commonwealth Education Conference which met at Oxford in July this year to discuss ways and means of promoting Commonwealth collaboration in the

educational field. In the Readers' Forum we publish the comments of three readers on the question of languages at the Secondary stage on which we initiated discussion in the last issue. The point at issue is : What is the future of the three-language formula which makes the study of three languages compulsory for every student at the Secondary stage ? We shall welcome the views of more readers on the subject which will be published in the next issue of this journal.

Other articles of interest included in this number are "The Growing Need for Guidance" (dealing with the subject of developing guidance in Indian schools) by an American visiting professor who came to India in 1958 under the Fulbright programme of International Exchange and "Schools for the Gifted in New York State" by the Principal of a Higher Secondary school in Delhi who went on a visit to the United States this year. The rest of the contents include accounts of school projects and teachers discussing their teaching methods, book reviews and educational news from India and abroad.

From The Commonwealth Conference Diary

by

K.G. Saiyidain

In July this year Shri K.G. Saiyidain, Secretary to the Government of India, Ministry of Education, went to the U.K. to attend the Commonwealth Education Conference held at Oxford. At this conference the delegates from the Commonwealth countries as well as the various African colonies met to discuss ways and means of promoting Commonwealth collaboration in the educational field.

We publish below some extracts from Shri Saiyidain's letter, recounting his impressions of this conference and a few other experiences, addressed to all Education Secretaries of the States.

I propose to share with you in this letter some of my impressions about the recent Commonwealth Education Conference, a few brief reactions to what I saw of the educational system in Scotland and a few general observations and comments about men and things and experiences which are not primarily of "professional" interest. I present them to you for what they are worth.

The Commonwealth Education Conference

There has been a good deal of cooperative effort in other fields, particularly economic—the Colombo Plan is an outstanding example of it—but so far education has not been regarded as important enough to require serious attention on a collective basis. This was the first-large scale effort in this direction in which all the Commonwealth countries as well as the various African colonies were involved. The U.K. Government played the host to the Conference and made arrangements for accommodating almost all delegates at Christ Church College, which gave the conference a certain academic dignity and sense of unity and brought the delegates into close personal relationship.

The "Commonwealth", as you know, is in many ways, a very heterogeneous organisation, socially, politically, economically, culturally and geographically. It includes a wide range of development levels from technically advanced and rich countries like U.K. and Canada to African colonies in some of which even women teachers have to be imported from abroad to start primary schools in villages. Their educational problems and progress are also consequently very different and varied. The Conference, however, undertook to pool together the educational and financial resources as well as the expertise of all the countries with the object of distributing educational facilities more equitably amongst them. Amongst the problems discussed was the creation of a pool of 1000 scholarships open to students of merit and promise from all participating countries in the fields of humanities, social sciences, natural science and technology etc. Of these, U.K. and Canada had initially offered 500 and 250 scholarships respectively and India offered one hundred. The target is actually likely to be exceeded when the offers of all other countries are finalised. Other important items on the agenda were the expansion of facilities for teacher training at various levels and adding considerably to the number of places available for technical and industrial training. Members of the Indian delegation took a prominent and well

appreciated part in the deliberations of the various committees and not only presented the case of their own country but also that of other Asian and African countries so far as their equality of status in all matters was concerned. It was agreed partly through their advocacy that the actual distribution of the scholarships offered and of the additional places for teacher training and technical education will be a matter of bilateral negotiations between the Governments concerned. I was Chairman of the Committee appointed for considering the rather difficult and complicated question of the supply and exchange of teachers. This is, of course, important for all countries concerned with educational development but, while in our country and certain other comparatively advanced countries, it arises at the level of specialists, it is acute in places like Ghana, Nigeria, Rhodesia etc. at almost all levels. So far, the needs of the colonies have been met mostly by importing U.K. teachers. The idea now is to throw the catchment area wider and recruit teachers for these regions on an all-Commonwealth basis and provide financial supplementation where necessary to encourage such recruitment. I had pressed for three important principles in this connection which were generally approved. Firstly, the eventual objective of all these schemes should be to build up the educational systems of these countries and make them capable of standing on their feet as early as possible through training their own men and women and strengthening their training and other institutions. Secondly, for this purpose, outside help should mainly concentrate on filling up what may be described as "key posts" through which teachers brought in from outside may be utilised at crucial points e.g. as Headmasters or teachers of training colleges where they can exercise a comparatively wider impact. Thirdly, I urged very strongly that, in this programme of give and take, this exchange of resource personnel, the personal qualities of teachers were of supreme importance. I pointed out that many well meaning schemes had come to grief or produced unpalatable results because the proper spirit of approach was lacking. What is that spirit ? I explained to the Conference what I had said at a T.C.M. Conference on an earlier occasion that this relationship between the giver and the taker was a delicate relationship and therefore, in all international assistance, "we must learn to give with humility and receive with dignity". If this is not borne in mind, the giver may become arrogant and the receiver servile, thus embittering mutual relationship. I feel that one of the advantages of this Conference has been to bring us into contact for the first time with a number of African educationists and administrators —both native and foreign—with their urgent needs thrown into sharp focus, leading to the recognition that we should all cooperate in their educational reconstruction and improvement. I was somewhat surprised to find that the main problem in countries like Ghana and Nigeria is not so much lack of finances—actually they pay their teachers much more than we do—as lack of trained personnel. And it is here that we can help, at least on a temporary basis. From the broader political and cultural point of view also, it is desirable that we send out Indian teachers to Africa, as also to South East Asian countries. If they are carefully selected so that they could serve as ambassadors of goodwill for their country, they can be of enormous service. We also hope to be able, under the schemes that are under contemplation, to send some teachers and scholars to western countries like U.K., Canada, Australia as well as our neighbouring countries to teach subjects like Indology, Indian languages, Philosophy and other subjects of special Indian interest of which they usually know very little. At the same time, we made it clear that in recent years India has made considerable progress in science and technology and we were in a position to offer training places, in some of our technological institutes and national laboratories etc. to students and scholars, both from technically developed and underdeveloped countries.

Facets of Scottish Education

The U.K. Government was good enough to arrange six or seven educational tours of a week's duration—in England, Scotland, Wales and Ireland—for parties of delegates, in order to give them a feel of the British

educational system as a prelude to the Conference. I chose Scotland as the venue of my tour and visited several universities, technical institutions, training colleges as well as primary and secondary schools. Here again, there is no point in my giving a full report of the tour but I would like to share a few casual but significant impressions that come to my mind.

We visited a number of schools in the small country of Selkirkshire and what struck me forcibly was the keeness of interest in local problems and the spontaneous cooperation of the people to improve the local school which they look upon as their concern. Things do not just happen. They are carefully planned through local initiative. One of them, for instance, was a single room school (founded in 1870) with 10 children located in a very small village, Lindean, where the roll had never exceeded 20. The teacher, a Miss Scott, had worked there for 30 years. I asked her whether she had ever felt lonely or suffered from a sense of frustration. She said no; she had enjoyed the experience, loved her work and received the goodwill and cooperation of the parents. And as for "loneliness", she had found social contacts, cultural activities and benefits of a Library in a small neighbouring town which was about ten miles away. There were other schools which impressed me with the way they had been planned and built—some of them quite new and a source of pride to the country and others "reconstructed", i.e. retaining but improving the old building while adding new wings. The best of the schools was really a symphony in attractive colours and restful effects—the result, I was happy to learn, of the collaboration of the School Art Master with the architect and builders. A time will come, I think to myself hopefully, when the iron clasps of economy will be loosened and we too will be able to plan our schools with imagination and a sense of beauty, combining functional efficiency with simplicity as well as artistic effects, confident in the belief that nothing within reason can be too good for our children. Most of us will not be there then but does that matter ? It is good to keep the vision alive.

We had many discussions with principals of colleges and vice-chancellors of universities about educational problems. The Moray House College of Education, for instance, is a well known institution at Edinburgh for the training of teachers at *all* levels where teachers for primary and secondary school as well as teachers of art, crafts and handwork have the advantage of being trained together and occasionally taught by the most distinguished professors on the staff. This College has a large number of overseas students, including Indians, and provides some special courses for their benefit e.g. on tropical education. I suggested to the Principal—as well as at the Conference later —that, in all such institutions, where many overseas students are admitted, it will be desirable to give some members of the staff an opportunity to visit the countries concerned and also, when possible, to appoint some teachers from overseas so that the College can guide them authoritatively and not teach its special courses in a kind of vacuum. The suggestion was welcomed and later endorsed by the Conference as desirable.

In Scotland, I found the academic tradition still very strong in the universities and it held its sway firmly over the secondary schools, which are still largely judged on the basis of their success in putting their students into the University. Also, the specialism which builds up dividing walls between natural sciences, social science and humanities is still undefeated and what we are trying to do —it is only a hopeful beginning yet— through the movement of General Education is not yet a part of accepted educational thinking. An interesting point cropped up in our discussion when a distinction was made between "close" professions like law and medicine where largely specialist education is needed and 'open' professions like industries, politics and education where new tasks and problems are likely to arise all the time and training has to be more general. It was felt that the universities should take both these types into account.

In this connection I ventured to point out that there were two significant changes in modern life which called for a change in emphasis or a new reorientation in Univer-

sity education. First, on account of the rapidity of change which characterised our age, the number of "open" professions was increasing and, with all due respect to specialised knowledge, breadth of vision and general mental alertness were even more important for a large majority of educated persons than such knowledge. Secondly, our increased insight into man and the inter-relationships of his personality and knowledge had revealed that, even in the case of 'close' professions, rigid boundaries were a handicap, that an engineer will be a better technician if he appreciated the socio-economic environment in which he was functioning and a doctor a better healer if he knew something of psychology and psycho-analysis and a lawyer a better man at his profession if he had studied something of science and sociology. I pleaded for this approach, for instance, at the Royal College of Science and Technology, Glasgow. What I said is nothing new—British educationists are sensitive to this problem—but tradition has strong roots and the academic mind accepts new ideas with dignified reluctance! They did, however, agree that it was necessary to move in this direction so as to bring University education into closer association with the urges and needs of the time.

Yet another point which may interest some of our University people is the concern which the Scottish University shows for the *quality* of admission. The attempt is to make as careful a selection as possible and, if it is found that, even then, there are students who lack either the ability or the character and willingness to pursue University studies seriously, they should be eliminated early. That is why the first year is a "great test of survival" and the correlation between school results and the first year record is not very high. But those who survive into the second year generally show little wastage and the 50% failure which dogs our University results at the Intermediate and Degree examinations is unthinkable there.

Of People and Things

As one goes to a foreign country, interesting things come to one's notice and one meets many interesting persons and incidents. Many of us have had the chance of visiting Britain but it is a country where the human scene offers inexhaustible material to draw upon. I noticed, for example, that, on the whole, the drivers in U.K. drive more carefully than our own and observe the rules and courtesies of the road more scrupulously. There are, of course, homicidal maniacs here as elsewhere but they are comparatively fewer. It seems to me that part of the reason is a greater respect for technology. A man who sits at a machine and wields it without knowing its power and its technique is apt to be careless and not merely incompetent. It is, therefore—partly at any rate—a matter of knowledge not being properly assimilated. We have to raise the standard of education—general or technical—required for many jobs and trades for which "three-quarter ignorants" are now accepted without demur. Also, generally speaking, *all* education should inculcate a more lively and uncompromising sense of social responsibility and public opinion should assert itself again behind hit-and-run tactics in life.

We paid a visit to Scot's home in the county of Selkirkshire where we were welcomed by his gracious great-grand-daughter. What a home this castle is, reflecting his life in all its expansiveness, richness and variety! In earlier days, some of these great men really lived incredibly full lives leaving their impress all round—persons like Goethe or Tagore who give new meaning, almost new dimensions, to life. Scot who is quite a cult in this part of the country not only wrote numerous books but built castles, planned gardens, made numerous fine collections, built up a good library and maintained friendships with most of his distinguished contemporaries in Europe. He even discovered, through patient study of old records, the jewels of Mary of Scotland—known as the Honour of Scotland—which had been buried for over a hundred years, no one knew where! Our generation—even at its best—is perhaps becoming too specialised and intense under the stress of modern living and is tending to lose some of the precious and expansive graces of the art of living.

My last engagement in London was a B.B.C. discussion with four other persons—including a well known educationist and broadcaster, Mrs. Mary Stocks—on the "Aims and Purpose of Education." It turned out to be quite lively and stimulating because some of us differed sharply, at least in our emphasis and our view of the range and depth of the educational purpose. Mary Stocks identified education with the "cultivation of the mind" to which one member of the team, Michael Duane (a Headmaster) and I took strong exception. Duane held that the main purpose should be the cultivation of "sensitivity and integrity". I argued that the cultivation of the mind alone was not only inadequate but dangerous, that the education of the heart and emotions was necessary for wanting the right things passionately and that the enrichment of the personality in *all* its dimensions was at least as important. Knowledge was a means to an end, the end being the "good life" in the deepest sense ; it was an instrument for teaching the gentle art of living which embraced many valuable things. Mary Stocks talked of her old nurse who had "all the sensitivity and the integrity" in the world but was quite uneducated and illiterate. I contended that if I had to choose between her and a highly 'instructed' person who had neither social sensitiveness nor the capacity to fuse thought and action into a decent whole, I would any day place her higher. This is not belittling knowledge or intellectual learning but putting it into its proper place—as a handmaid to life in its completeness. Similarly, when it is argued that the aim of education is training for citizenship, it is well to remember that a child is not only the citizen of his geographical state but also of the kingdom of truth, goodness and beauty which knows no frontiers and of a "city not built by hands." To this, she retorted that in discussing education we should keep our feet on the ground and not lose our earth rootedness. My defence was, and is, that 90% of the forces in our life are working all the time to keep us earth bound, that education is one of the forces which should seriously try to counteract the pull of gravity and give us the vision of what man and his life might be, if we displayed not only greater intelligence but greater kindliness and greater respect and solicitude for human individuality. Intellect uncontrolled by vision has piloted us to the brink of an inconceivable disaster. Let the qualities of charity, compassion and love take a hand in averting the disaster.

And so I end, as I began, with education which continues to be a fascinating challenge and, with all its present shortcomings and frustrations, is the *one* defence we have against losing our dignity, our decency and the priceless heritage of our finest human values.

"Literacy is not the end of education nor even the beginning. It is only one of the means whereby man and woman can be educated." —*Mahatma Gandhi*

THE STATE AND THE TEXTBOOK

By

K.C. Khanna

Principal, Delhi Public School, New Delhi.

LARGE commercial undertakings, enterprises and industries are known to have been nationalised in various countries with the object of running them for public benefit but this has not so far extended to books. The policy of nationalisation is calculated to keep out the profit motive and to concentrate on the maximum degree of service to the country. It obviously requires considerable administrative planning and experience if the Government is to make a success of public enterprises. Nationalisation has been successful here and there but not without exception and welfare states are not unduly anxious to expand its sphere at the expense of private enterprise.

The printing and publishing of textbooks for schools has seldom come within the orbit of this policy even in our own country but six or seven years ago, a few States adopted this policy with a firm conviction that it would lead to desirable results.

How the idea originated

It will be interesting to understand the background of this policy and to find out the conditions under which it originated. For years States have had Textbook Committees which performed the function of prescribing suitable books for schools below the Matriculation standard. In the undivided Punjab the printing and sale of prescribed books was entrusted to a single firm of publishers. The standard of selection was quite good. However, it cannot be stated that all the books prescribed by the Textbook Committee were of equal merit. Now and then, books were prescribed which did not conform to an unexceptionally high standard. This applied particularly to subjects in which alternative or supplementary books were prescribed. Public opinion began to suspect the motives of those responsible for prescribing these books and it was felt that the Textbook Committee was not performing its functions with a full sense of responsibility. This led to its abolition by the State Government. In its place an Advisory Board was established to take the place of the Textbook Committee and the policy and procedure of prescribing books for schools was examined most thoroughly. Various conclusions emerged on the surface, namely: Educationists in Government service, who were otherwise well qualified to write books should be given greater freedom to write books as the previous policy of permitting a few had led to undesirable and underhand arrangements on the part of others. The books were to be selected with the greatest care on the basis of reviews from persons of established integrity. Of course the names of the reviewers had to be kept entirely confidential to prevent authors and publishers from establishing any contact with them. The publishers of such books were also to be selected with the greatest care so that the Government could be sure that they had the necessary standing and experience in the publishing trade and printing facilities to print the books well and to make them available in time. In order to make the administrative machinery pay for itself, Government was to get a small royalty of 5% or so on the sale proceeds of all books so published. Any author or publisher was to be free, under such a scheme, to submit his book in manuscript form, if he wanted to avoid unnecessary expense.

As one can see, this scheme held no prospect of any kind for a book which was not considered good on its merits. It was

almost perfect and without any loopholes. Only it had not taken into account the wide disappointment which would be caused to a large number of unsuccessful publishers. In actual effect, publishers with long experience of book preparation and publishing caught hold of the more reputable and well-known authors with the result that their books were prescribed. While the decision taken by the Government was correct and flawless, it could not satisfy large number of authors and publishers, whose books had not been prescribed and who did not hesitate to impute motives to the highest authorities. As a result of continuous political agitation on this and other points, the Government was superseded.

Nationalisation and its working

It was against this background that the question of nationalisation of books was brought to the forefront by the critics of the previous Government on political grounds than as a scheme well thought out in all its bearings. The objectives of the scheme of nationalisation were laid down in the form of better and cheaper books which our growing democracy needed. If there were to be any profits, they would go into the coffers of the Government rather than into the pockets of the previous publishers. The authors were to get a nominal royalty instead of the more handsome royalties which they used to get from the publishers. All this sounded extremely good on paper. But it was not long before the defects in the working of this new policy began to appear. The Government machinery was ill-equipped to meet the heavy demands for all those books for schools, which it had undertaken to prepare, print and supply. Its officers had no business experience of the kind which is essential in making a public enterprise successful. Very much less time was allowed to publishers and authors who were to present books for prescription under the new scheme of nationalisation. The result was more or less a mess on a large scale.

Printing and publishing, like any other trade, are specialised jobs and must depend for their success on previous experience. The Government machinery had no such experience. To pursue the goal of cheapness, books were allowed to be printed on newsprint and other paper of inferior quality. Considerations which normally apply to the selection of type points for different age-groups were occasionally brushed aside. In one particular case, a primer which was quite well produced and illustrated with due regard to the units of lessons for little children, was replaced by a primer in which one lesson ran into another and the cover page illustrations were dispensed with. This was done merely to reduce the size and price of the book and all other improvements referred to above were completely ignored. The Government Press was unable to cope with the job. As books were given for printing on the basis of tenders to publishers with inadequate facilities and experience, the printing was not at all up to the standard. Books were produced with large numbers of printing errors of which no one could be proud. Publishers who had lost their business, were not slow in printing booklets indicating these errors. They pointed out that even if the final proofs had been read by the authors, the latter for the paltry royalty which they were to receive, did not have the time nor the inclination to do a first-rate job. To cap it all, several books were not made available at the time of promotions. In these circumstances the policy of nationalisation came under heavy fire in the press, on the platform and even in the legislative bodies. All that the Government could cite in their favour was a few lakhs of rupees which they had added to the public funds.

Judging by results

The policy of nationalisation of books today stands more or less discredited on the basis of its poor achievement. Some Governments are already thinking of retracing their steps. Thinking of this policy in retrospect, if the object of the Government was to lower the prices of books, they could easily have achieved it in a different way without involving itself in nationalisation. The same authors who had agreed to receive low royalties from the Government under the scheme of nationalisation would have agreed to a

reduction of their royalty for public good if only they could be assured of their reduced payment. Undoubtedly the *bona fides* of all successful publishers were not equally trusted by the authors. Government could have found a way of ensuring the interests of the authors. Fearing a total loss of business the publishers would have agreed to any reasonable arrangement. They would also not have hesitated to reduce their profits provided the prices of published books fixed by Government allowed them a reasonable margin of profit.

Speaking generally, while we have not been able to achieve much positive good we have certainly allowed ourselves to do a certain amount of harm. No free democracy like ours can take any steps, which will expose its policies to obvious criticism. The opposition parties in the States, which adopted the policy of nationalisation, have been emphasising the fact every now and then that the Congress Governments are interested in regimenting thought through the medium of textbooks. This opens up serious possibilities. Any opposition which comes into power tomorrow will not hesitate to cancel the previous books and to put fresh ones into the hands of young scholars, which will be more appropriate from their point of view. Actually the Communist Kerala Government following the example of Communist countries exposed itself to this criticism.

It is a serious matter for thought whether for reasons which were put forward in support of nationalisation of books at the time, it was worthwhile entering into the position in which we find ourselves today. We greatly admire books produced in other countries, particularly literature for children. It is a sad commentary on our own effort in this direction that when any book exhibition is arranged, books from other countries, particularly Soviet subsidized books for children find a prominent place in our collection. It is not suggested that good children's books are not being produced in India. Private publishing houses endeavour to make available good books of standard value in various regional languages but their prices are not particularly low. Such books are outside the field of textbooks. It is not understood why we cannot content ourselves with laying down good syllabuses and leaving it to enterprising publishing houses to produce good books. It will always be open to the Government and prescribing authorities, to fix the prices of such books keeping in view the reasonable margin which must be allowed to the publishers.

If Government is afraid that such free competition will again create conditions of monopoly in favour of a limited number of well-established publishing houses, it should concentrate its attention on devising a scheme whereby monopoly conditions can be controlled, and lesser publishers can also have an opportunity of serving their country. Even this kind of a scheme with its artificial limitations will be better in its total effect than the one of nationalisation.

Under no conditions can we afford to take retrogressive steps in the name of economy. India must produce books for its children which are both good and attractive. If poor scholars cannot buy illustrated books, then we should be ready to subsidise them or even to provide them free at a later stage. This is no counsel of perfection. In U.S.A., England, Ireland, books are given free to children. In the Republic of Eire, books are given free to those children whose parents cannot pay for them. Is it too much to hope that India will also achieve this object not in the very distant future ? In the meantime we must make sure that the quality of textbooks is greatly improved through private enterprise.

READERS' forum

The Future of the Three-Language Formula

In the last issue we initiated discussion on the question of languages at the secondary stage. The question posed was—what is the future of the three-language formula as recommended by the Central Advisory Board of Education at its meeting held in January, 1956 and which has been accepted wholly or with certain modifications by all the States? This formula makes the study of three languages compulsory for every student at the secondary stage—mother tongue, Hindi and English. In this issue we continue the discussion and publish the comments of three writers on the subject, of whom one wishes to remain anonymous.

I

S. Mathai*

IN any discussion of the place of languages in the educational system of a country, it is necessary to bear certain general principles in mind. First of all, language is a tool. People learn languages because they expect to be able to use those languages for one or more purposes. Sentiment, political considerations, economic and social advantages may all enter into the study of languages and the provision for such study made in the curriculum of the educational system of a country. Only very few people learn languages for the pure fun of learning them; and very rarely is a language required as part of a school course purely for sentimental reasons. Utility is the primary consideration. What language or languages are most useful for boys and girls in any place to learn is determined largely by the existing circumstances at any given time.

Every normal child begins by learning its mother tongue. The mother tongue is not learnt first of all in a school. It is literally learnt at the mother's knee. Ordinarily, in most situations that we may think of, the first language that a school system should enable a child to study properly is its mother tongue. When the child enters school he or she is already in possession of a reasonable working knowledge of his or her mother tongue. What the school then attempts to do is to give a better grounding in that language so that the young boy or girl who already knows the language for certain purposes may be able to use it more intelligently and with a greater consciousness of its proprieties.

It is usually agreed that the best medium for the instruction of a child is its mother tongue. But we must not assume that in fact it universally happens that every child first of all learns its own mother tongue in the school and is taught through it as a medium of instruction. In India, for instance, there are several areas in which the mother tongue of the people is a language without a formal script and without an official literature. In such areas children do not in fact learn their mother tongue in

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schools. For instance, on the West Coast of India, the mother tongue of a large number of people is Konkani or Tulu. Neither of these languages, though spoken by thousands of people, is recognised as an official language and children are not taught these languages in school. They learn the official regional language and it is not supposed to be any real handicap to a child. A child bred in an area where the prevailing regional language is something other than its own mother tongue acquires the regional language with almost the same facility as that with which it acquires its mother tongue.

Then, in most civilized countries of the world it often happens that there is a cultural language which at least a proportion of educated people consider it an advantage to know. In our own country for the large majority of people Sanskrit is such a cultural language and it is only right that the educational system of the country should provide the maximum opportunity for the study of the language to whoever may wish to study it, and a good educational system should provide incentives to a large number of students to take up the study of such a cultural language. To a few others in our country, Persian or Arabic may be such a cultural language just as to most European people Greek and Latin or even French are cultural languages.

It may happen in certain countries that there are more languages than one that require more or less equal emphasis in the educational system. In such a situation it is almost obvious that a student should be asked to learn not only its own mother tongue or regional language but also one of the other national languages, because an educated person would be expected to want to move beyond the limits of his own region or at any rate to want to acquaint himself with what goes on outside his own region. Now if one of the many national languages in a country, for any reason whatsoever, acquires a certain predominance, then that language achieves a certain priority amongst the languages other than the mother tongue that the child may be asked to learn. The predominance of one of many languages in a given situation may be only potential as it is in the case of Hindi in India. But it is important that the language which the conscious will of the people selects as the one that should be given priority of consideration is taught to all students who go to school in a country. In the United Kingdom, for instance, in certain parts Welsh is the mother tongue of a number of people. In this area the children not only learn the Welsh language but also English which is the prevailing language of the whole country and its official tongue.

It may happen again that self-interest requires that the children of a given area or country should learn a language other than their own because it is to their advantage in the workaday world to have a knowledge of that other language. Thus we find that in most European countries the school system provides for the study of at least three languages. In many of the Western and northern European countries boys and girls not only learn their own mother tongue but two other languages from their neighbourhood. Very frequently it may be English or French or German. Academic opinion in Europe does not seem to subscribe to the view that the learning of two or three languages by school boys and girls is a hardship. Children learn languages fairly easily and in any case the degree of proficiency expected to be achieved in the foreign languages that the European child may be asked to learn is not of a very high order. The main intention is to give the child sufficient grounding in these new languages so that it will be a part of the mental equipment of the child and if later the boy or girl has need or opportunity to use that language further then he or she can do so with comparative ease. What the school does is to equip the boy or girl with one or more tools that would be at the disposal of the boy or girl in later life. The argument that the study of more than the mother tongue is a needless hardship on the boy or girl is not a convincing one. A good part of the many subjects that boys and girls in schools are asked to learn is in fact a burden to them in some ways. Most of us, for instance, never use the Geometry that we may have learnt in school. Without going as far as Henry Ford who declared that "history is bunk", we may say that

much of the history that may have been compulsorily taught to us in our school days is not in fact of much use to us in our daily life. But very few people would argue that the curriculum of a school should consist only of subjects that would be permanently of "use" to the child. Education must necessarily consist of the study of many subjects which are of value in the development of the mind and provide the intellectual discipline that enables a person to fit into civilized life. Actually, languages are more "useful" than many other subjects taught in schools.

I should now like to consider some of the points made by Shri Veda Prakasha in his article in the July 1959 issue of this journal.

The Place of English

I do not agree that the future of English as a compulsory subject in the school curriculum will or should depend entirely on whether or not it continues as the medium of instruction at the university stage. The large majority of boys and girls who leave schools do not and will not enter the university. So the purpose of teaching English at the school must be that it is good for boys and girls to have some acquaintance with that language, and whether or not English will continue to be taught in our schools after a given period of time will depend not on the place of English in the university but on the place of English in the affairs of India and of the world. No one can speak about the indefinite future in such matters. We can only plan for the foreseeable future. The collective judgment of the large majority of people who have thought about the educational system of this country has come to the conclusion that in the present situation it is desirable to teach English to our boys and girls in school. I think it would be most unfortunate if needless phychological barriers are created in the study of English by politically-minded persons who raise controversial questions merely for raising them. If, some day, in the opinion of persons competent to judge such matters, the study of English by Indian students seems a wholly useless exercise, we shall of course abolish it from our system. We may then find that it would be to our advantage to study some other foreign language. But at the moment both the accidents of history and the circumstances of the world around us seem to justify the study of English by our boys and girls and it would be very poor wisdom indeed if on some doctrinaire grounds we abolished the study of English.

The study of an Indian language other than the mother tongue

For the kind of reasons that I have referred to above, in a multi-lingual country like ours it is most desirable that every person should be at least bilingual. It is a good thing therefore that our school system requires that every boy or girl should learn an Indian language other than the mother tongue or regional language. Since it has been decided that Hindi will be the official language of the country, naturally Hindi will be the Indian "second language" that the large majority of children would learn, and it seems desirable that the study of Hindi should be made compulsory. No one would reasonably object to this. But when we come to the study of another Indian language by boys and girls whose mother tongue or regional language is Hindi, objections seem to be raised by some persons on the ground that it is a needless burden to the child. Now this seems to me to be a wholly unreasonable argument. As I have indicated, many subjects that we teach our children in schools are a burden to them. Indeed education itself is a burden. The natural tendency of most children would be not to want to learn anything. A school system must provide subjects of study that in the judgment of persons competent to plan the educational system of the country seem most desirable in the interests of the growing generation. In India a very important consideration is what has been popularly referred to as the emotional integration of the country. Nothing will assist this process of emotional integration so much as the learning of a language other than the mother tongue by a large majority of our

children. The learning of another language by Hindi-speaking people will make the rest of India real to them and will enable them to enter with greater sympathy and understanding into the problems of at least one other region. We have done enough harm to our educational system by needless controversies about the language issue. It would be most unfortunate if responsible people said that the learning of a South Indian language by a Hindi speaking person was a burden to him but the learning of Hindi by a South Indian should be no burden to him. It is not simply a question of equal distribution of the load, it is rather a question of providing to our youth the kind of education which is most suited to the real needs of the country today.

The motivation that a young boy or girl may have in learning a language as part of the curriculum is not what older people may assume. The feeling expressed by Shri Veda Prakasha that the Hindi speaking boy or girl will have no real incentive for the learning of a South Indian language is really the feeling of some adult persons who do not in fact want to learn a South Indian language themselves and would like to see Hindi dominating all over the country in an unbalanced manner. The child's attitude is determined by the attitude of older people. We recall that in the days when the learning of English was considered to be a great advantage and a great opportunity, children learnt it readily enough, and people did not argue that it was a needless burden. The airing of controversial opinions by persons in authority merely succeeds in enervating the teacher and taking away the incentive of the child to learn one of the subjects in his curriculum with the same willingness with which he might learn any other subject ; and if such agitation succeeded in making the Hindi-speaking person a mono-lingual person whereas the people in other parts of the country would be bilingual, in the ultimate result the Hindi-speaking student will be handicapped.

In spite of the recommendations of the Secondary Education Commission, the judgment of the Central Advisory Board of Education and the judgment of a great many other persons who have thought on this matter have arrived at the three-language formula. What we now need is a concentrated effort to work this formula, to create an atmosphere of enthusiasm for the study of languages and if we succeed in making all our boys and girls who go through school emerge with a working knowledge of three languages, we shall have created a generation well equipped to face the world around them and I am sure in my own mind that future generations will bless us for having introduced a formula by which they are able to contact a wider world than that in which their own mother tongue flourishes.

II

WHILE drawing up a curriculum for any stage of education the main consideration ought to be the necessity of fitting the educated person into the society into which he is going to live and work in the future. This is the principle on which all curricula are framed and this is the only justification for various subjects to be assigned their respective places in an educational scheme. While framing curricula for languages for Secondary schools, therefore, this objective has to be kept in mind. A student should be equipped with sufficient efficiency in the language or languages which will be necessary for him in the life that he will be required to lead. The three-language formula has, therefore, to be tested on the anvil of this criterion.

Background of the three-language formula

Those who were present at the 23rd meeting of the Central Advisory Board at which the above-mentioned decision was taken, would remember that the main defects of the two-language formula of the Secondary Education Commission that were pointed out at that meeting were (i) that it did not provide for the compulsory teaching of English, (ii) that it did not make Hindi compulsory for students from the non-Hindi

speaking States, (iii) that it in fact placed a student in such a position that if he took up the study of Hindi he had to give up that of English and if he took up the learning of English he had to give up that of Hindi, if Hindi was not his mother tongue and (iv) that if a student took up either Hindi or English then he could not take up Sanskrit or any other classical language. At one stage the Central Advisory Board had accepted the two-language formula, but it soon began to be realised in many of the States and particularly at the Centre that there was need for a change and that such a change was indicated which could provide for the study of English on an almost compulsory basis and make the learning of Hindi obligatory for all non-Hindi speaking students. The three–language formula was, therefore, evolved with a view to removing the defects of the two-language formula. Let us see whether the three-language formula has solved our difficulties and whether it is an improvement on the previous one.

By the three-language formula English or any other modern European language has become a compulsory subject, but the number of students who take or will take any other modern European language will of necessity be microscopic because of the cost and inconvenience involved in providing teachers in other modern European languages. English, according to this formula, becomes a *de facto* compulsory subject. According to the two-language formula, Hindi was also not a compulsory subject for non-Hindi speaking pupils and could be learnt only as an optional subject and that also if the study of English or the classical language was given up. One of the reasons of pushing Hindi into the position of a subject for compulsory study may have been to counterbalance the insistence on making English a compulsory subject in the three-language formula. It was felt that if the study of English alone was made compulsory, then it would amount to giving too much importance to a foreign language. Therefore, it was thought fit that along with English Hindi should also become a subject for compulsory study, in order to give equal importance to English and to the would-be-official language. If the new formula had stopped at this it would have resulted in two languages having been made compulsory for Hindi-speaking students and three languages becoming compulsory for non-Hindi speaking pupils. It, therefore, became necessary to do something for the non-Hindi speaking pupils to compensate them for having made the learning of Hindi compulsory for them or at least to provide an equal load of languages to Hindi speaking and non-Hindi speaking students. Therefore, the study of a modern Indian language was made compulsory for Hindi-speaking pupils. This was the trend of reasoning on the basis of which the three-language formula was evolved.

Its defects

It will appear that the remedy supposed to have been provided by the three-language formula has proved to be worse than the disease. It has really introduced more defects than there were in the two-language formula. The first defect is that English has been made a compulsory subject for all which is quite unneccessary for many. The other defect is that Hindi has also been made obligatory for even those who may not wish to learn it or for even those who may, rightly or wrongly, be opposed to it. A modern Indian language other than Hindi has been made compulsory for Hindi speaking pupils, which is absolutely superflous. No independent place has been given to the study of Sanskrit or any other classical language. Purely from the utilitarian point of view also it will appear that for the vast majority of pupils coming out of our Secondary schools the knowledge of English may not at all be necessary. Similarly, making Hindi compulsory for all non-Hindi speaking pupils is also a step which is not at all called for and may unnecessarily antagonise some from the non-Hindi speaking areas. There is hardly any justification for any other modern Indian language to have been made compulsory for Hindi speaking pupils. Not that any other modern Indian language is less important or less rich than Hindi but that it hardly plays any part in the life of the vast majority of the Hindi speaking children. No doubt the knowledge of an additional language can be an asset in his life but in this way if a child is taught half a dozen languages they

will all be assets in his life. We cannot, on this argument, go on increasing in our curriculum the load of languages. While framing a curriculum a balance has to be maintained between the time, effort and energy devoted to a subject and its direct usefulness. On these considerations, therefore, the three-language formula does not justify itself.

No controversy about the mother-tongue

The least controversial position in the formula is that of the mother-tongue or the regional language. It is admitted by all that a place of pride and importance has of necessity to be given to the mother-tongue and/or the regional language. This was the recommendation of the Secondary Education Commission and it has also been the view of the Central Advisory Board of Education. This has been accepted by all the States and is being implemented. There is no doubt, debate or difference over this point.

The position of English

The position of English is really the crucial and pivotal point on which the evolution of a curriculum in languages for our Secondary schools revolves. When, according to the recommendations of the Secondary Education Commission, English was not given the position of being a compulsory language it was felt in many quarters that the study of English should be made compulsory at the Secondary stage because (i) it continued to be the official language both at the Centre and to a very large measure in the States, (ii) because English was the medium at the University stage and would probably continue to be so and (iii) because English was a window on the world. Let us examine the position of English in our Secondary schools from these three points of view.

No doubt English at present is the official language at the Centre and in the States, but is it going to continue to be so ? The Constitution has provided that by 1965 English will be replaced by Hindi as the official language of the Union Government and similarly various regional languages will replace English as the official language of the States. It is still six years to 1965, and if a genuine effort is made, much can be achieved even during this short period. But opinion seems to have veered round to the point that it is not possible to achieve the Constitutional objective by 1965. In fact many have started doubting the wisdom of this provision in the Constitution and some have gone so far as to say that this provision was made in the first flush of enthusiasm and that it should now be changed. It is however as well to remember that many great things are achieved in the first flush of enthusiasm. If men or nations were to be guided only by cool calculations of the difficulties that might come in their way, then the progress of the human society would be at a standstill.

But the question is—do we really believe that English can continue to occupy its present position in our scheme of things ? We must remember that even today after more than 150 years of domination of the English language over the official, political and national life of the country there are not more than .5% of the population who possess knowledge of English, if a little smattering of the language could be called knowledge. The number of persons who have a fairly good command over the English language is still smaller. This is the result after a long period of over 150 years during which English not only occupied a dominant position but was the only medium and means of all important national activities and when the intelligentsia of the country tried their best to learn and to teach English. In spite of all this, English has not yet touched even a fringe of our vast population. To continue to run the Government through the medium of a language which is not only foreign but which is not understood by more than 99% of the population is nothing but a farce and a mockery of democracy. So long as it continues to be the official language it is of course necessary and desirable for us to see that provision is made for the teaching of English for all those who wish to learn it. But it should be optional and not made obligatory for all students who go to a secondary school.

From the point of view of English being the medium of instruction at the University, we may remind ourselves that not more than 20% of students who pass the Secondary School Examination go to universities. This means that English is to be of no use to more than 80% of those who pass the Secondary School Examination so far as education at the University stage is concerned. This is and will be the position even when it is presumed that English will continue to be the medium of instruction at the University stage. In fact it is not going to be so, because already regional languages have started replacing English at many of the universities. For instance, the Gujarat University has made Gujarati the compulsory medium of instruction. Many of the universities of northern India have introduced Hindi, if not as the only medium of instruction, at least as one of the optional media of instruction. The S.N.D.T. University for Women has the regional languages as its media. Universities like that of Shantiniketan, Gurukul Kangadi and the Rural Higher Education Institutes do not have English as the only medium of instruction. In this way it will be seen that some headway is being made as regards replacing English as the medium of instruction at the University stage. Teaching English compulsorily to all students at the Secondary stage because some of them may necessarily need it at the University stage is not right. The most that can be done is that English should be an optional subject, so that those who wish to take it may do so and others who think that they would not need it may not be made to take it.

In this connection the experience of the Secondary School Certificate Examination Board, Poona, of the Bombay State, is very illuminating. Although English has been one of the compulsory subjects for classes VIII to X in Secondary schools, under the jurisdiction of the Board, yet English is not now for the last few years a compulsory subject for passing the S.S.C. Examination. This means that the S.S.C. Examination can be passed without taking English as one of the subjects. After this provision was made there has been a gradual increase in the number of candidates who pass the Secondary School Certificate Examination without taking English as one of the subjects. The number has increased and now about 15% of students who pass this Secondary School Certificate Examination do so without English. There has been at least one case in which a student, without taking English, has topped the list of thousands of candidates passing the Secondary School Certificate Examination. In this way it will be seen that once English is made an optional subject there will be a gradual tendency to give it up. It is indeed distressing to know that the largest number of failures all over the country is in English.

Passing the Secondary School Certificate Examination without English has indirectly been a boon to Primary education in as much as a large number of candidates who pass the Secondary School Examination without English become teachers in Primary schools. In this way the academic standard of teachers in Primary schools has incidentally gone up. Since they have not passed the examination with English, they cannot go to a university and the result is that they fall back upon the teaching profession in Primary schools. Primary schools thus get the advantage of being run by teachers who are Matriculates and are quite well up in all subjects except English.

The argument that English is a window on the world is really applicable to only those who go to a university. For a child who gives up his education at the end of the Secondary stage, his knowledge of English even if he has learnt it, is not really sufficiently advanced to enable him to use it. Moreover, no nation can ever hope to achieve much in the academic and the intellectual fields, be it in Science, Technology, Philosophy, Literature, Law etc., if it continues to depend upon a foreign language to be its window on the world. There cannot be much hope unless all these subjects are studied through the mother-tongue, as indeed all progressive countries are doing. It will not be wrong to say that countries have become progressive because the language of the intelligentsia and the common man is not different but

the same. In spite of thousands of Indians having tried for hundreds of years, only a few have succeeded in achieving any international fame in producing literature in English. The achievements in the literature of our regional languages have, however, not been so meagre during the corresponding period. Our scientists also have faced a similar handicap. The number of great intellectuals, as is well known, is in proportion to the population. If the vast majority of the population is denied the benefits of higher education, the number of men of exceptional ability produced by such a country is bound to be small.

Should English be compulsory or optional ?

The argument is often advanced that if English is made an optional subject it will be too early for a pupil to decide, in the lower classes, whether he will require the knowledge of English for either entering Government service or for going to a university or for undertaking any commercial venture of international character. No doubt there is a lot of truth in this. The simple solution to this difficulty will be that English should be permitted to be taken up by any student at any stage that he chooses. If a pupil has not taken up English in say Class V, which is the beginning of the Secondary stage, he may do so at any subsequent stage, before or after he passes the Secondary School Examination. Provision should also be made that even after completing Secondary education. a child may prepare privately or at certain institutions and pass Examinations in English and be considered equivalent to have passed the Secondary School Examination with English. If such a provision is made it will not be necessary to force millions of our children to compulsorily learn English because a few of them may need it in the future. It is with this objective in view that recently the Government of Bombay have taken a decision to start the teaching of English from an earlier stage, that is, from Class V instead of from Class VIII, but only as an optional subject and not as a compulsory one.

The position of Hindi

Hindi has been recognised in the Constitution to be the official language of the Central Government because we have to have a language, which is understood more or less throughout the country. Fortunately or unfortunately, such a language cannot be any other but Hindi. In the past also Hindi or Hindustani had been a sort of common link between the people of the south and the north, the east and the west. If one travelled from Rameshwaram to Kedarnath or from Dwarka to Puri he would come across people at every place who could understand some sort of a Hindi or Hindustani. The other reason why no other language can take the place of Hindi is that Hindi is the one language which even today is spoken by the largest number of our countrymen. Hindi is the mother-tongue or the regional language of almost 40% of the population. If any other Indian language is selected to be the common language, that language will have to be taught to about 85% of the population whereas if Hindi is assigned this function, only 60% of the population will be required to learn it.

This, however, does not mean that Hindi should be made a compulsory subject of study at the Secondary stage. As has been proved by statistics, Hindi has advanced as well in areas where it has not been made compulsory as in others. The three-language formula is somewhat defective in so far as it makes Hindi a compulsory subject for all the non-Hindi speaking pupils. It must be made an optional subject and its learning should be left to the initiative, enthusiasm and the good sense of the local leadership.

It is but natural that Hindi as the official language will place the Hindi speaking pupils at same advantage over the non-Hindi speaking ones, since the former will not be required to learn an additional language whereas the non-Hindi speaking students will be required to learn Hindi in addition to the mother tongue or the regional language. To remedy this defect the correct thing will not be to make

a language other than Hindi compulsory for Hindi speaking people, for how is the learning of Hindi for students in non-Hindi speaking areas going to become easier if students in the Hindi speaking areas, separated by a distance of hundreds of miles, are made to learn an additional modern Indian language ? But it is desirable for Hindi speaking pupils to learn another modern Indian language. This language can be the one which is spoken in the neighbouring State. For instance, Bihar students could learn Bengali and Rajasthani students could take up Gujarati. By creating interest in the literature of the nearby modern Indian language, Hindi pupils will easily take to learning another modern Indian language. The majority of the regional languages have their source in Sanskrit and therefore they are not so very different from each other. This however is not the case with English.

It has been suggested that a modern Indian language other than Hindi should be made compulsory at examinations for entry into Government services in Hindi speaking States. This will not be so practicable, but what will be more easily practicable will be that, for entry into all Central services, the knowledge of a modern Indian language may be made compulsory in addition to the knowledge of Hindi. It will be even better if along with making Hindi as the official language for all the States, the regional languages are also permitted to be optional media of communication from one State to the other and from the States to the Central Government. For instance, a communication from Madras addressed to Bombay could be sent in Tamil and the Government of Orissa may write to the Central Government in Uriya. In that case State Governments will also need persons knowing regional languages other than their own. If regional languages are also made a sort of associate official languages for correspondence between the Centre and the States, then it will indirectly foster the necessity of learning an additional modern Indian language.

The three-language formula is unsuitable

In this way the three-language formula which makes the study of English as well as that of Hindi almost compulsory for all pupils hardly meets the requirements of our Secondary education. In fact, there is no State which has scrupulously adopted the three-language formula. In most of the cases it has remained on paper and has not been implemented. Many of the States have put into practice a formula which provides for the compulsory study of the mother-tongue or the regional language and for the study of one or more other languages to be selected from : English, Hindi, other modern Indian languages, other modern European languages, classical languages etc. There are other variations also. In some States the study of English is compulsory, in many others the study of Hindi is also compulsory. The number of languages that a student is compulsorily required to take also varies in different States from two to three and options also are provided for taking up the study of more than two or three languages. Various combinations and permutations have to be provided. But, in main, the following requirements must be met :

1. A good knowledge of the mother-tongue or the regional language. This should be compulsory.
2. An optional opportunity to learn English.
3. Provision for learning Hindi as an optional subject at different levels—elementary, advanced etc.
4. An option for Hindi knowing persons to learn any other modern Indian language.
5. Provision for learning a modern European language other than English as one of the options.
6. Provision for learning a classical language on an optional basis.
7. An option for learning a composite course of the mother-tongue and a classical language.
8. An option for learning a composite course of Hindi and a classical language.
9. Provision for the option of learning a composite course of Hindi and the mother-tongue or Hindi and the regional language.

When the above is translated in terms of a formula it will take the following form :

A. Any one of the following :

(i) Mother-tongue
(ii) Regional language
(iii) A composite course of mother-tongue and a regional language
(iv) A composite course of mother-tongue and a classical language
(v) A composite course of a regional language and a classical language.

B. Any two of the following :

(i) English
(ii) Any other modern European language
(iii) Advanced or Elementary Hindi, if Hindi is not taken under Group A
(iv) An Elementary or Advanced course of a modern Indian language other than the one taken under Group A and B (iii)
(v) A composite course of Hindi and a classical language
(vi) A composite course of a regional language and a classical language other than the one taken under A (v)
(vii) A classical language
(viii) A composite course of Hindi and a regional language or Hindi and the mother-tongue, if not taken under A.

C. In addition to the above a student going in for Humanities may be given the option of taking one more language from among the Group A and B above. This additional language will have to be taken in lieu of some subject from the non-language groups.

III

M. D. Sharma*

IN his article "The Future of the Three-Language Formula" Veda Prakasha cogently argues that the future of the formula depends on the three languages involved. According to him, Hindi will get a predominant place provided it retains its constitutional position of being the official language of the country; the regional languages cannot take root in the Hindi-speaking States unless the States concerned make their study an essential qualification for entry into government service; English will cease to be a compulsory subject in the secondary school curriculum if it does not continue as the medium of instruction at the university stage. In the processes of his reasoning, the writer has expressed several doubts and questions saying that the anti-Hindi concensus is the result of the aggressive policies of the Hindi protagonists, that there seems to be no justification for making Hindi compulsory beyond what will apply equally to the study of other languages in the Hindi-speaking areas, that it is very doubtful if the demand in the Hindi-speaking areas can be created for the study of an additional language, that whatever the cultural or political significance of teaching an additional modern Indian language in the Hindi-speaking areas there is little justification for making its study obligatory, that pro-English feeling is identical with anti-Hindi feeling, that with the recent reconstruction which seeks to make secondary education terminal there is little justification for making English compulsory, that the basic issue is that of standards and if no minimum standards are laid down, an undirected curricular policy will lead to purposelessness, that the English-Hindi controversy will not subside if no definite date or programme is fixed by the Centre, that an educational policy which seeks to enforce three compulsory languages must be prepared for facing the problem of wastage on a colossal scale.

A Fallacy in the Argument

No thinking person would deny the excellence of the logical structure and the wealth of the factual data, which have gone into the preparation of the author's brilliant study. But one would be inclined to think that too much reliance has been placed on the argument that the future of the three-language formula will depend on the future

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of the three languages involved without further asking on what the future of the three languages themselves will depend. I think the fundamental factor in deciding the future of the three languages involved is the evolving Indian society with its conflicting values and educational choices, human feelings, convictions and decisions, social targets and cultural goals, political and economic urges, which have altogether been kept out of discussion.

Purpose of Discussion

It is the purpose of this discussion to examine in the light of social purposes of education if the languages involved in the three-language formula are to be taught as academic subjects as part of liberal tradition, or they are essential to our national survival and should form a compulsory part of our secondary education curriculum. In sum, we have to examine if the three-language formula is far removed from the major issues of our national survival and will come up for revision with academic changes in our present structure,—or it has roots in history, and the nation will be inclined to work it out as an abiding solution to certain problems of national importance.

Roots of the Formula

The three-language formula arises out of the three forces of revivalism, westernization and synthesis which, since the time of Lord Macaulay, have been playing a significant role by combining together or contending against each other in bringing about all the important changes in the Indian society. It was perhaps to this great fact that the Prime Minister, with his characteristic insight into the forces of history, alluded when speaking on the language question in the last monsoon session of the Lok Sabha. He said :

"Behind the question of language was action, interaction and powerful pulls. One was the pull of the past, and the other was the pull of the future, the pull of modern scientific and technological world."

The idea of these pulls is fundamental to my argument and I must spend a short time over it. As is evident, while the pull of revivalism frowns at the possibility of submergence of the great Indian culture by an alien culture and swears by its own cultural heritage, the force of westernization swears by the technological progress of the West and the fact is that neither the philosophical culture of the East nor the technological culture of the West can claim the whole truth which belongs to the synthesis of the East and the West which together make a full circle round. The future, therefore, belongs neither to the pull of revivalism nor to the pull of westernization but to the pull of synthesis. The distinguished leaders of India, men like Ram Mohan Roy, Vivekananda, Tagore, Gandhi, Aurobindo Ghosh, Randhakrishnan, Jawaharlal Nehru, known all over for their significant contribution to the world of thought and culture, have invariably cast their influence on the side of synthesis. Winding up his recent speech on the language issue referred to above, Jawaharlal Nehru said :

"It was important that a link should be established between the past, the present and the future and an attempt should be made to bring about a synthesis between the two cultures, the literary and the scientific."

It will be redundant to say that the language formula is the outcome of our tradition of synthesis which has proved to be one of the enduring traits of the national genius and the formula will endure as long as the need for synthesis in the language area will endure. If its functioning requires any adjustment, the national genius will make it.

The foregoing brief sketch of the source of the formula is necessary to give us the correct perspective to make a probe into the possibilities of its future as also into the various criticisms of the formula.

The Charge of Heavy Load

The assumption that to teach three languages is to impose too heavy a burden on the young mind underlines the doubt

that the three-language formula will form the corner stone of our evolving national pattern of education. Of this educational criticism it is but logical to seek the solution in the educational theory. That some heat should have gone into the controversy on this point is to be expected because the educational theory, of late, has broken some new ground. Education was usually taken to mean 'academic instruction' and this interpretation is still supported by one strand of common usage. There is, however, a wider role of education which enjoins upon the individual to understand the factors which constitute the world he lives in, including those which are closest to his personal experience as also those which are most remote. Thus the educational programme has to prepare the individual for the immediate local community, as also for the larger communities of the State, the Nation and the World which lie beyond it, and which in these days of ever-shrinking distances have become inevitable constituents of one complete community. Improvements in the direction of the electronic devices show that the world will shrink much further. Therefore, if we are not planning for ten or fifteen years hence, we have to equip the child in the languages of his local or regional community, national community and also the world community. These three languages alone can contribute knowledge sufficiently regarding their respective areas and should be included as a necessary part of education for modern life even at the expense of other subjects now in the curriculum.

Instruction through the Mother Tongue

The three-language formula rightly provides for instruction through the mother tongue as a functional part of education because the mother tongue is both a part and expression of the child's immediate environment. This makes the mother tongue serve an inevitable social purpose which could be served by no other language and, thereby, makes the future of the mother tongue in the secondary school curriculum assured. Even if it is not the regional or state language, provision has been made to impart instruction through it, provided a sufficient number of pupils speak the language. If it is a regional or state language also, it will become the official language of the State, the Legislature and the court of justice. It will be a functional part of education at all stages in the region. This part of the formula has wide acceptance, a fact which has rendered the place of the mother tongue in the formula safe.

Hindi

Hindi has been made the federal official language with provision in part XVII of the Constitution that it will replace English, the official language during the British rule. A doubt has arisen if Hindi will come into full use in the business of the government, legislative, executive and judicial or the majority vote would amend it in course of time. A doubt has also arisen if the knowledge of Hindi will be coveted as a compulsory asset, for the Constitution only provides that Hindi will be the official language ; it does not say that Hindi will be the medium of university education.

It need hardly be said that in matters of Constitution, the will of the people is paramount. No Constitution provides a complete system, it does little more than lay the foundation of principles. It requires the initiative, the wisdom and the hard work of the people to translate the constitution of the books into the constitution of the living reality. In every parliament, at times, emotions run high and there are hostile criticisms, but in cool moments people always give precedence to the larger interests of the community as a whole over their local or parochial interests. In America, when the Constitution was in the making, emotions ran so high over the language issue that the people seemed to be bent upon discarding English and adopting Hebrew as their official language ; but they finally decided upon English for reasons of convenience. In Soviet Russia, the Turkish group adopted the Latin script, though afterwards they changed it for the Russian (Cyrillic script) finding it more suitable to the genius of their

tongue. The Indian people have a knack for cool thought. It is true the franchise in matters of official language lies with the non-Hindi speaking people. There should be no doubt that practical considerations of finance and personnel will weigh upon them as also patriotic considerations of national unity and security and they will exercise their franchise judiciously in the interests of the national community as a whole.

Psychologically, threat provides an incentive to the people and the constitutional threat to the position of Hindi will activise the Hindi-speaking people to atone for any flaw in their behaviour caused by the first flush of enthusiasm. Recent speeches of our leaders laying emphasis that the different languages spoken by a community of men, free, responsible, dignified and living in a multilingual society are equally worthy of respect will give a new sense that if a certain language is chosen as a lingua-franca for the whole society it is so for reasons of convenience only. The Hindi speaking people will take Hindi to have been selected as the federal official language for the same reason and no other. Such an attitude will be able to inculcate cooperation among the various language speaking groups.

As to the fixing of a date of replacement and giving a definite programme, perhaps the Centre has been wise not to have given it till the conditions of its acceptance have been ensured. One important pre-condition to such a programme is to remove the fear from the minds of the non-Hindi speaking people that they cannot attain the same standard in Hindi as the people in the Hindi speaking areas. The question of standard and the best ways to achieve it should be decided by a body of linguists in cooperation with a body of educationists and professional educators. The speediest way is for linguists to analyse a corpus of language which the educationists should shape into reading material to be carried by professional teachers into the classrooms all over the country. This sequential material, properly graded, and taught, will give to the learner in the non-Hindi speaking area sufficient mastery of the language. I would venture to suggest a three-pronged programme of research, training and teaching. It will be a team work of linguists, educationists and educators working on the course of a 5-Year sequence. Supposing the linguists and educationists start their work in the beginning of the calendar year 1960, they will analyse and prepare the reading material for the first year of Hindi within six months to be made over to the training colleges or mobile training squads to start their work not later than July, 1960. Given a year for the training of teachers we will have the first batch of trained teachers by June, 1961. Research and preparation of reading material continuing simultaneously with teaching, the first five-year sequence in the secondary schools will be completed by June, 1966. This will enable the Centre to fix the date of phased replacement programme to start from mid-1966 when they will start getting the personnel who will have equal command over their regional and national languages. If simultaneously with this programme a five-year part-time course, specially designed for those who need it in the various departments of the Central and State Governments, is also started the foundation of a switch over by 1966 will have been well laid. Once these sequential courses, run by modern methods and techniques, give the impression to learners in the non-Hindi speaking areas that the second language can be mastered practically as well as the first, the anti-Hindi concensus based on fear complex would dissolve itself.

The Regional Languages

The three-language formula makes an additional language compulsory for the Hindi-speaking areas. It has been argued that this part of the formula will remain a dead letter as there is little educational justification in imposing such a language on the Hindi-speaking areas and also for lack of funds and personnel the Hindi-speaking areas will not bring it into operation. It is felt that this part of the formula has been framed to honour and compensate the non-Hindi areas for their study of Hindi. This is untrue. Our country is as vast in area as the Continent of Europe minus Russia

and the reasons which apply to other European countries apply to us as well in the study of languages. The following table will give an idea of the first, second and third European languages studied in some parts of Europe :

	I	II	III
Denmark	English—90% German—10%	German English	French
England	French	German	—
France	English or German	German English	Italian or Spanish
Germany (Western)	English—95% French—5%	French English	—
Holland	English & French	—	German
Luxemberg	German	French	English
Norway	English	German	French
Sweden	English	German	French
Switzerland	French or German	English or Italian	Italian or English.

In Germany an effort is being made to get all schools, with minor exceptions, to adopt English as the first foreign language.

Besides Hindi and Sanskrit there are 12 major languages in India enjoying the status of a national language. The knowledge of the various regions is intimately represented in them and to know the factors which constitute the region, it is necessary to know the language in which they are intimately expressed. If the knowledge of these factors is imperative, the study of these languages is also imperative. It is true, normally speaking, that no one individual can understand all these factors, as no one individual can study all these languages but all individuals put together can understand all these factors put together. Therefore, a system of education has been sought to be established in which the study of all these languages has been accounted for. As to the practical difficulties of funds and personnel, the overtaxed States will certainly find it impossible to procure them but would perhaps have no objection to agree to any scheme which would bring this part of the formula into operation without involving financial obligations. The Central Government will hardly be willing to undertake the entire expenditure over the teaching of additional regional languages but would perhaps agree to operate this part of the formula provided minimum expenditure brings maximum returns. If this is agreed upon, an inter-State exchange of teachers between the Hindi speaking and non-Hindi speaking areas, on the basis that the States pay the exchange teachers at their rates and the Centre may pay the usual dearness and house allowances at the Central rates and apart from the travelling allowance for the initial journey, also provide for a free return trip home once a year. The assignment should be given on a five-year basis to teachers, preferably below 35 years, with an aptitude to teach and learn languages. The advantages of this method are obvious. The

teachers will gain in respect as, backed by the Centre, they will have a distinguished position on the staff in other States and on their return to their native State will be respected for their new experience and knowledge gained in an area with a different dominant language. The States will get qualified teachers for an additional subject without incurring any extra expenditure at least in the initial stages of the scheme. And the Central Government by incurring a minimum expenditure will enable the States and individuals to forge new bonds of allegiance to the Union Government. From the point of view of synthesis and cultural integration, this part of the formula is the most valuable and should be an integral part of the national system of education we are now evolving.

English will continue

Will English cease to be taught as a compulsory language when it ceases to be an official language at the Centre and medium of instruction at the University level ? I think not. English links us with the biggest, the richest and the most respected speech community of the world and is so important a vehicle of knowledge that it is required to be taught at a more extensive scale now than ever before. Our leaders and people appreciate its intrinsic value and will not allow a costly asset to be thrown away.

It is undeniably true that English is indispensable to us for higher research in science. At lower levels it may be possible to have a scientific career with no other but the regional language, but on higher levels scientific research has become so complicated that no progress can be made without a complete knowledge of the latest conclusions arrived at by great scientists of other progressive countries. Scientific research cannot be conducted through translations for the obvious reason that if a translator had enough knowledge to interpret scientific research, he would carry on scientific research and not waste his time translating.

Likewise, there is much literal truth in the argument that progress becomes impossible without the study of foreign languages. Progress in the field of international and diplomatic relations with English-speaking countries will be affected and our insight into the complicated system of imports and exports, and even banking, industrial management and other modern arts will be dimmed unless we have access to modern developments in these areas which we know through the study of English.

A doubt has arisen that due to the recent reconstruction of secondary education, which seeks to make secondary education terminal, there is little justification for making the study of English compulsory because a vast majority will neither proceed to the University nor have any other use for their attainments in English. Such doubts arise because even in this age of science we are apt to consider language-study as a part of liberal education. Such a mistake continued to be made by the U.S.A. till the Second World War brought a realization of the unavoidable need of foreign languages in military situations. The advancement of electronic devices and modern means of communication have further highlighted the discrepancy between the training of the classroom and the needs of the individual. Even when our secondary school ceases to be college preparatory and functions as a terminal stage for majority of students, still the need of our times is such that English should continue to be an indispensable part of an Indian child's study. It matters little if English ceases to be the medium of instruction at the university level or as official language at the Centre. It has more vital roles to play. It has to serve the people by giving them a new outlook and a new way of living. Let us examine the utility of its study for the Indian peasant. Food production is the first problem in India. There is available a lot of technical knowledge but its door is closed to the Indian peasant because of the language barrier. Equipment, fertilizer and technical advice are also available but the stranglehold over the advance in food production has been caused by the conservative unchanging outlook of the illiterate peasant.

The same applies to our national problem number two viz. the control of population growth which involves problems of instruction and overcoming traditional habits. There are various other problems which could be solved by a change of outlook through the study of a Western language, and this Western language, in our present conditions of limited finance, personnel and system of education has to be English for the sake of convenience.

There are apprehensions, and the apprehensions are based on a formidable data of adverse examination results, that the area of failure will become colossal if an attempt is made to make English a compulsory language for all students at the secondary stage. Examination results are not the sole predictor of the capacity of the learner to grasp a foreign language. Moreover, scientific methods of teaching modern languages have been evolved which will solve this problem to a considerable extent.

Summing up

The Three-Language Formula arises out of the forces of revivalism and westernization and belongs to the tradition of national synthesis. Even when the questions of the official language and the medium of instruction have been resolved the formula will need no revision, for it alone can best serve the interests of the nation as a whole.

Our entire educational outlook towards the study of languages has changed and languages are studied not as part of liberal education but for the essential knowledge of the regional, national and world communities that they impart. As such, the study of a regional, national and world language will be a compulsory part of our education for modern living.

The mother tongue is the part and expression of the immediate environment and its place in the formula has given general satisfaction. The constitutional threat to Hindi will activise Hindi protagonists to change their outlook and the application of sequential teaching and modern teachniques will encourage the non-Hindi population to out-do the native speakers of Hindi in proficiency. Schemes to provide personnel to implement a phased programme of replacement of English can be devised so as to fix a date for the changeover to Hindi. The study of regional languages will be acceptable to the States if an inter-State exchange programme of teachers is devised with little financial involvement on the part of the States and minimum expenditure for maximum returns for the Centre. This part of the formula is most valuable from the point of view of national unity and security and will be found workable. English will continue to be taught as a language inevitable for our progress and will find an important place in the curriculum even if secondary schools become terminal. Scientific methods of study will be devised so that a child can work in the other two languages as well as in his first language and the time and effort he will have spent in language study will not be in vain even if he has to give it up at any stage.

The three-language formula is indispensable for national synthesis and will form the corner stone of our evolving national system of education.

State Nationalisation of Textbooks

We publish in this article accounts of two States, Bihar and Punjab, describing their experience of nationalising textbooks. The main points covered are—why the State nationalised, whether the objectives have been achieved and whether the State proposes to extend or continue its scheme of nationalisation of textbooks.

I

BIHAR

by

Jagdish Narain Sarkar*

In our country where the overwhelming majority of people are illiterate, and where the education even of those who join a school, may not go beyond the primary stage, the importance of ensuring the production of balanced textbooks, possessing factual accuracy, reliability, interest and vitality for the pupils of various age groups and a certain cultural background at the primary and secondary stages, is greater than in more socially advanced countries with greater scope for education. Hence the preparation and selection of textbooks is a subject of tremendous importance from the educational point of view.

Background

A textbook committee was first set up for Bihar and Orissa in 1913, and reconstituted in 1915, 1923 and 1925 to go into the question of textbooks for high, middle and primary schools for Indian pupils written in English, Bengali, Urdu, Hindi, the vernaculars of Chotanagpur and other languages.

Before 1949 there was no scheme of departmental publication of textbooks. Books submitted by publishers were considered by the Textbook Committee and the latter used to approve books found suitable for use in high, middle and primary schools. The list of approved textbooks was published under the authority of the Director of Public Instruction, Bihar. Under Article 800 of the Education Code, however, the State Government enjoyed the prerogative of prescribing textbooks for use in schools in a particular subject in exceptional circumstances. Accordingly several books were prepared under the direction of the Hindustani Committee (1938-47) and prescribed as the only approved textbooks. With the change of syllabus in classes VIII and IX from 1949, several serious complaints, viz. blackmarketing and delay in printing were made against the publishers

It was therefore in 1949 that the Committee was reconstituted to advise the Director of Public Instruction and the Government regarding the appointment of expert committees for preparation, review and translation of textbooks. The functions of the Committee were also enlarged, viz , to get textbooks written by writers in consultation with expert reviewers and also to arrange for their printing, publication and distribution according to the State Government's instructions given from time to time. The Committee was a purely advisory body.

It was in only 1950 that the Government undertook the preparation of textbooks as an experimental measure. The Textbook Committee was entrusted with the task of preparing and publishing textbooks for classes VIII and IX in subjects for which no suitable books were available in the market,

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e. g., General Science or graded series of English Readers. In other subjects books were approved from the available books. It was expected that the preparation and publication of textbooks by the Textbook Committee itself would help in removing the evils which had crept into the system of prescription of textbooks and would raise the standard of textbooks. In 1953 the sphere of the activities of the Committee was widened to include all subjects up to class XI.

In the light of experience gained and in accordance with the recommendations of the Secondary Education Commission the Textbook Committee was reconstituted in Resolution No. 3076 E dated the 4th June, 1955 and renamed as Textbook and Education Literature Committee. But it continues to be an advisory body acting on behalf of or at the behest of the Government. The main functions of the Committee are (i) to prepare, publish and distribute textbooks on behalf of the Government (ii) to select and prescribe textbooks submitted by publishers and authors. Textbooks for classes X and XI are approved by the Director of Public Instruction on the recommendations of the Courses Committees. For classes I to IX books recommended by the Textbook Committee are prescribed for the recognised schools.

The following charts indicate the progress of nationalisation :

CHART I

Year	*No. of books published by Textbook Committee*
1950-51	55
1951-52	66
1952-53	70
1953-54	86
1954-55	89
1955-56	107
1956-57	141
1957-58	145
1958-59	149

CHART II

Class	*Number of subjects in which textbooks have been published*	*Name of subjects*
I	6	(Hindi, Arithmetic, Santhali, Kharia, Oraon and Ho)
II	6	-do-
III	5	(Hindi, Arithmetic, Santhali, Oraon and Ho)
IV	2	(Hindi and Arithmetic)
V	2	-do-
VI	2	(Arithmetic and Geometry)
VII	2	-do-
VIII	15	(English, Hindi, Chemistry, Physics, General Science, Indian History, Geography, Social Studies, Arithmetic, Trignometry, Mensuration, Algebra, Biology, Geometry, Universal History)
IX	15	-do-
X & XI	8	(English, Hindi, Urdu, Santhali, Social Studies, Economics and Civics, Universal History, Indian History)

N,B. : Number of books published—149
Books in non-language subjects are printed in Hindi, Urdu and Bengali. Only Arithmetic for classes I to III are also printed in Santhali beside Hindi, Urdu and Bengali.

Besides the Textbook Committee there are the Basic Education Board and the Adult Education Board. The report of the Bihar Primary, Middle, Basic and Social Education Enquiry Committee (under the chairmanship of Shri K.G. Saiyidain Feb. 1953—Dec. 1955) appointed in Government resolution No. 29159E dated the 22nd October, 1952 recommended that "the Department of Education should take steps to get suitable books prepared which shall meet the needs of Basic as well as non-Basic schools and enable the students to understand the important and living problems of the country". Accordingly the Basic Education Board has produced literature for the Basic and Post-Basic schools and published altogether 26 such publications. The Adult Education Board has also brought out 126 publications so far, besides a weekly magazine called the *Janjiwan*.

Objectives of nationalisation

The main objectives of nationalisation are:
(1) to improve the standard of textbook writing and production ;
(2) to reduce the price of textbooks ;
(3) to make them available in time ;
(4) to publish books on subjects in which there is very little sale.

Let us see whether nationalisation justifies itself against these objectives.

As far as the first point goes, there is no doubt that nationalisation of textbooks has to a large extent removed the evils associated with the selection of publishers' books. The rule requiring submission of books by only registered publishers tends to limit the range of good books available for selection, as some prominent publishers may not like to register themselves. Approval of books on zonal basis allows partial monopoly to the publishers who, in the absence of competition, may not be inclined to improve the quality of books. On the other hand if there is no zoning, it is apprehended that only big publishers manage to get their books selected for use in schools. If selection is left to the heads of institutions and inspecting officers, books may be selected not on their intrinsic merit but on other non-academic grounds. The ultimate responsibility, however, of such prejudiced selection will be of the Department whose duty it is to ensure the maintenance of proper standards.

The Secondary Education Commission significantly refers to the not infrequent influence of non-academic considerations in the matter of prescription of textbooks. To remedy this defect they reiterate the principles laid down in the Government of India Resolution of 1873, namely, (i) the appointment of a Standing Committee of reference (in each province) to choose, or if necessary, to prepare appropriate textbooks in Indian languages and to draw up a list of suitable books for adoption in different schools, (ii) to take steps to prepare suitable textbooks in a particular subject for which no textbooks exist. The Commission emphasised that the Education Department should take a direct interest in this matter and that some textbooks should be published directly under the auspices of the Textbook Committee.

However, even though the Government has tried as far as possible to maintain high standards of textbook writing and production, there have been complaints against the books published by the Textbook Committee—errors in subject matter, errors in printing, defective illustrations, unsatisfactory presentation, etc. To remove these defects and ensure proper standards, the department has approved the scheme of a Bureau of Textbook Research.

The second objective of nationalisation is to reduce the price of textbooks. At present the rate of cost of publication of books printed by private publishers is seven pice and six pice per forme when printed on 28 lbs. and 24 lbs. paper respectively. For Government publications in which imitation art and super calender paper and cover page of a very high order are used, English books are priced at 2½ annas per forme and Hindi books at two annas per forme. It has been estimated that about 100% profit accrues to the Government out of the preparation and publication of books. The Bihar Legislative Assembly Estimates Committee, First Report, 1958, recommended

that to check blackmarketing, the prices of books published by the Government should not in any case be higher than those of private publishers and the pricing policy of the Government not only shows monopolistic tendencies but puts a premium on unsound business management.

The State Government is considering the question of fixing the prices of books on 'no profit, no loss' basis. It may, however, be stated that the purchase of copyright of certain selected primers for class I out of the several submitted by private publishers is also under the consideration of the Government in order to reduce their price.

The third consideration is whether the books are available in time. In this State there was public agitation in 1956 regarding the non-availability of textbooks. But there have been no complaints in 1957, 1958 and 1959 and this is mainly due to the vigilance of the Department which gives highest priority to the timely supply of books. Printing is arranged before the beginning of the next session and the Department holds weekly reviews of progress of printing in each book. Penal clauses have been introduced in the order form to the presses. Arrangements have been made for stocking paper. Requirements of books are assessed in advance. Publishers' presses are also approved, if necessary, to cope with the increased volume of work. Additional outside proof-readers are appointed besides official proof-readers.

The sale of books which was formerly done through registered booksellers, has been thrown open to all booksellers, registered or unregistered, since the session 1957-58. Books are also despatched by the stockist (formerly State Cooperative Bank, from February 1952 ; and now the State Cooperative Marketing Union, since May 1958) to various Agricole Depots and branches situated at subdivisional headquarters and Credit Agricole Depots. Books are also sold to the Bihar Provincial Teachers' Cooperative Union and High School Teachers' Cooperative Stores. As the Teachers' Cooperative Union is handicapped for want of funds, credit facilities in lifting books from the stockists were raised from Rs. 25,000/- in 1953 to Rs. 50,000/- in 1953-54 (which continued till 1957-58) and to Rs. 75,000/- in 1958-59. Books worth Rs. 500/- are also supplied on credit and in advance to recognised and aided high schools against their requisition. Teachers of primary, middle and high schools have also been allowed the benefit of taking books on usual commission allowed to booksellers.

In the beginning a total commission of 25% was allowed. Now this has been reduced to 20% on sale.

To ensure regular supply of books to the remotest sale points, the Sub-Divisional Educational Officers are directed by annual circular letters to keep a constant liaison with the officers in charge of sale points in their jurisdiction and to take such steps in joint consultation as necessary in the matter. They have also to submit weekly reports on the position of supply of textbooks to the Department, State Cooperative Marketing Union and the Educational Literature Officer. Reports are abstracted by the Deputy Director of Education (General) and sent to the Director of Public Instruction and Government separately for information. The scheme of sale and distribution is reviewed annually and modifications are made, if necessary, in the light of experience gained. Copies of a booklet published by the Department on sale organisation, containing names of books, prices and sale centres, and copies of relevant circulars have been supplied to all schools and inspecting officers. The latter have also to keep watch over the sale of spurious editions and submit reports.

The fourth objective of nationalisation is to see that books are available for all subjects, regardless of the popularity of some subjects over the other. There is always a possibility that on account of the existence of alternative subjects in the diversified courses of studies, only a few students might take up a number of subjects. Similarly when teaching is done in regional languages, e. g. Santhali, Ho, Kharia, Oraon, and Mudnari, textbooks in these subjects may not yield profits. In either case private publishers are reluctant to produce textbooks in such subjects. In such cases the problem can be solved only if Government published such textbooks themselves. From Chart II it will be seen that this objective has been largely achieved.

Problems

If nationalisation helps to remove certain disadvantages of publication of textbooks by the private sector, it also creates certain problems which impede its working and to that extent hinder in the realisation of its objectives. These problems arise in the course of textbook production which involves three distinct processes - the preparation of manuscripts, printing of books and distribution.

(a) *Preparation* : (i) Books published by the Textbook Committee are written by a panel of authors appointed by the Government. Formerly these were reviewed by a panel of two reviewers but since 1956, reviewing is the responsibility of the convenor. Each panel of authors is paid Rs. 1,500/- a book, besides royalty after the first year, at 2½% of gross sale. This rate of payment does not compare unfavourably with that of publishers but when the panel consists of three, the remuneration comes to only Rs. 500/- each and this is a flat rate irrespective of the size and standard of the book. The result has been that some eminent teachers decline to accept the work and even the willing authors are not serious enough. Work also fell behind schedule resulting in delayed publication of books. The need of rationalising the system i.e. of paying remuneration commensurate with the labour and standard involved as pointed out by Bihar Legislative Assembly Committee on Estimates (First Report, 1958) is urgent if the objectives of nationalisation are to be realised. The Committee also felt strongly that no book should be approved without seeing the manuscript, a practice which encourages authors to take things easy, and results in printing books with inaccuracies and mistakes.

(ii) Books of private publishers are secretly reviewed by a set of two reviewers for each subject in each class appointed by the Director of Public Instruction, who review each book individually and then jointly. On the basis of their joint recommendation the Director of Public Instruction approves the best book. In case of divergence of opinion, advice of a third reviewer is taken. This procedure, while it ensures thorough work, takes some time and is likely to cause delay if not properly planned. For example, in 1956 delays occurred in approving books, which in turn delayed publication.

(b) *Printing* : If the preparation of manuscripts is the responsibility of the Educational Literature Officer, their printing comes within the sphere of the duties of the Education Publication Officer. As the department has no printing press of its own, it has to depend on private presses. Paper was formerly received direct through mills but the Government of India have now discontinued this system, with the result that the problem of getting paper of the requisite quality and quantity at a comparatively cheap rate and in time has assumed serious proportions. The Department has certain arrangements for stocking paper but these are neither adequate nor sufficient to stock the requisite quantity of paper on strictly scientific lines.

There is a Second Five-Year Plan scheme of setting up a departmental press for printing educational literature and to ensure efficiency and speed in publication work, but the Bihar Legislative Assembly Estimates Committee doubts the wisdom of "projecting the energies of the Education Department into channels of business enterprise and highly technical management of printing business."

(iii) *Distribution* : As already explained, the department has no agency of its own for distribution and so it has to depend on private agencies for marketing and sale of the textbooks.

Even so, in spite of heavy odds, the Education Department of the Bihar Government have during the last three years, successfully solved with the cooperation of all, the problem of making textbooks available in sufficient numbers to the school children. This, however, cannot be said of the other two objectives, namely, improving the standard of textbook writing and production, and reduction of price. In these matters, on the contrary, the standard and quality of textbooks have suffered because there is no open competition. Security of payment also does not encourage better production, and so Government books are often criticised for being inferior.

Can a solution be found ?

The Education Department of Bihar has been engaged in printing books under the auspices of the Textbook Committee since 1950. As such it cannot be said that the non-realisation of some of the objectives of nationalisation is due to inexperience. Even during these ten years or so all the processes of textbook production have not yet been completely nationalised in this State. The approval of publishers' textbooks apart, only the preparation and publication are done under the auspices of the Textbook Committee. But even here the department is not completely independent. From first to last it has to lean on others for implementing its scheme of limited and partial nationalisation. It has to depend on writers (not always the best), it has to rely on reviewers (not always impartial), it has to depend on private agencies for printing and look to outside agencies for distribution and sale. Thus it happens that if there is negligence at any stage of textbook production, it is the department that has to shoulder the responsibility. This raises the question whether the department and the Textbook Committee are fully competent and equipped in different ways to undertake this work. Textbook production is admitted to be essentially a business concern, requiring full knowledge of the arts of business management at the organisational level and prompt execution. It is no reflection on any one to say that the departmental officers do not always possess the requisite degree of business acumen or training in the art. Then again, the Textbook Committee has not yet got a wholetime Secretary. The Department has of necessity to work and move through myriads of files and adhere to certain rigid rules of procedure, involving examination and decisions at the various levels within the department and also at inter-departmental levels (e.g. Finance Department) and secure orders of the Chief Minister and of the Council of Ministers. The recent experience of purchase of copyright of some primers in class I in 1959 teaches us that steps have to be taken even more than a year in advance. What is required is speed, and speed is the first casualty of red tape.

Another important question to be decided is—what should be the number of books to be prescribed for each subject in a class ? In the case of a government publication there is no difficulty, as the department gets it written. But this has been a vexed problem in the case of private publications. Much, however, would depend on the evaluation of the books by the reviewers. If they rate several books equally or within a small range, it would be desirable to approve them. Academically it is the best policy to prescribe only one book, rated the highest, for use throughout the State, as pointed out by the Bihar Legislative Estimates Committee, 1958. But this sometimes gives rise to complaints of favouratism on the part of the department and the Textbook Committee.

Does nationalisation lead to regimentation of thought ?

It is sometimes urged that nationalisation leads to regimentation of thought and indoctrination. On this point the Bihar Legislative Estimates Committee, 1958, has the following recommendations to make on the departmental method of preparation of textbooks : "The Committee recommends that the present system of getting books written by selected panel of authors may continue and be improved upon, subject to the condition that in order to avoid intellectual regimentation and to tap such abilities as are not mobilised in the official panel of writers, books written by independent authors may also be called for to compete with books written through official agency".

Calling for books written by independent authors will, however, mean additional expenditure in that payment will have to be made to authors appointed departmentally and to those whose books are selected. But it is worthwhile to incur this additional expenditure for the sake of maintaining high standards. Alternatively manuscripts may be invited from authors, selected and purchased and then edited by a panel of editors appointed by the Government. This will minimise cost and induce a competitive spirit among authors.

Thus, it is my opinion that nationalisation, worked on the right lines, that is, if high standards are constantly kept in view, will not lead to regimentation of thought. But if this objective is lost sight of, the

possibility of indoctrination etc. cannot be ruled out.

Does the State propose to extend nationalisation ?

The position of preparation, publication and distribution of textbooks was discussed at a meeting of the Textbook and Education Literature Committee held on the 13th September, 1957. A sub-committee was appointed to examine whether the present system should continue or some other arrangement made. The report of this sub-committee is under preparation.

The Department is trying to collect information on the following points:

(*a*) *As regards publication and distribution* :

(i) Whether the present system of partial nationalisation and partial supply of textbooks by private publishers should continue ?
(ii) Whether the State Cooperative Marketing Union should continue to be the central stockist.
(iii) Whether open sale should continue.
(iv) Whether there should be complete nationalisation with arrangements for stocking books.
(v) Whether nationalisation should be abandoned and textbooks be left entirely to private publishers and booksellers.
(vi) Whether any textbook should be prescribed by Government at all or should only the syllabus be prescribed, leaving the institutions to select books conforming to the syllabus.

(*b*) *As regards management* :

(i) Whether the Textbook Committee should be a limb of the Directorate with a whole-time Secretary or it should be an autonomous corporation.

A decision will be taken after all these questions are examined. It may, therefore, be said that the State Government still keeps an open mind on the future of nationalisation of textbooks in Bihar.

II

PUNJAB

by
R. C. Khanna*

In Punjab the government formulated its scheme of textbook nationalisation in 1953 with the object of reducing the prices of textbooks and improving their subject matter. The circumstances which led the Punjab Government to embark on the scheme are briefly narrated below.

After the Partition and with the advent of Independence, it became necessary that the scheme of studies for our schools should be revised. Old books seemed completely out of place and unsuited to the new conditions. Accordingly, the Punjab Government, with the help of the Punjab Advisory Board of Education, had detailed syllabi prepared for Primary, Basic and Middle schools. Simultaneously, it set itself to the task of getting ready books on new subjects like Social Studies, Health Activities and Recreational Activities. This had to be done because there were no textbooks in Hindi and Punjabi—the two regional languages of the State—available on these subjects. This was the first venture of the Punjab Government in the field of publishing textbooks. At the same time, the Government tried to persuade the private publishers to improve the quality and content of the textbooks published by them and to lower their prices. But the publishers, used to high profits, did not cooperate and the textbooks produced by them continued to be of the same quality and standard and their prices high as before. This led to repeated representations from various quarters urging the government to do something in the matter. It was under such circumstances that the Punjab Government

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decided to launch upon the policy of nationalisation of textbooks. The main reasons for adopting this policy were :

(1) To put an end to the corrupt practices which the publishers had adopted to bribe the teachers to prescribe their textbooks in preference to those of others:
(2) to do away with the evils caused by the selection system;
(3) to reduce prices;
(4) to improve the educational value of the content of the books; and
(5) to improve the physical appearance of the books.

Scope and execution

The scheme has covered textbooks for classes I-VIII. The total number of textbooks produced by the Punjab Government is 153. Out of these 60 textbooks are no longer prescribed for use as class readers. So the present number of textbooks in use for the Punjab schools is 93. The Pepsu Government likewise nationalised textbooks for classes I-VI before the merger of Pepsu with Punjab. The number of Pepsu nationalised textbooks is 41 and these are still used in schools in the erstwhile Pepsu area. The total number of nationalised textbooks in active use for the Punjab and Pepsu schools, therefore, comes to 134.

Judged against the objectives of the scheme, nobody will deny that the scheme has been as unqualified success so far an the first two objectives are concer ned. Before the advent of nationalised textbooks, it was not the best books which were prescribed in most of the schools but of those publishers who could manage to win over the school authorities. And the result of the multiplicity of textbooks in use in the State was that a student migrating from one place to another was faced with the difficult situation of buying and studying a different set of textbooks. At the same time the prices of school textbooks have appreciably come down, and the reduction is as high as 40% in several cases. In view of the general poverty of the masses, this advantage of the nationalisation scheme cannot be overlooked or minimised.

The nationalised textbooks have also shown some improvement in content and language. The Punjab Education Department does not claim that the present textbooks are perfect and flawless, but these are decidedly better than those produced by the publishers after the Partition. There is a strong nationalistic trend visible in the lessons of these textbooks, and much care has been taken to see that the students imbibe the spirit of social service. This is not to say that we are now fully satisfied with the standard of the present textbooks. In fact the improvement of textbooks is a continuous process and the ideal cannot be achieved all at once. In fact the experience gained each year is valuable for achieving this objective.

In only one respect, namely, in respect of printing, the nationalised textbooks could not attain a high standard in the beginning. In the absence of any arrangement for the printing of Hindi and Punjabi books at the Government Press, it was natural that the first attempts at printing through the agency of hastily set up private presses in the State should show numerous flaws. That phase is, however, over and the later reprints of the nationalised textbooks have been much better. And now when most of the textbooks are printed at Government presses at Chandigarh and Patiala, we find the printing and illustrations appreciably improved. As a matter of fact there will be still further improvement in the get-up and printing of the nationalised textbooks because the Finance Department has agreed that the actual cost of production—i.e. expenditure on paper, printing and binding should be raised by 25 per cent. The Government has been approached for another increase of 12½p. c. in the actual cost, without ofcourse raising the sale price of the textbooks. Our aim is to place in the hands of our children such textbooks as are carefully planned, properly graded, neatly produced and suitably illustrated and available at a reasonable price.

Are books available in time ?

Another thing which has yet to be successfully tackled is that of ensuring timely and regular supplies of nationalised textbooks. The machinery which arranges the printing

of these textbooks works according to an accepted routine. Many times reprints can not be promptly brought out as the procedure of calling tenders and alloting work takes much time. Even though an attempt is made to do most of the printing of the nationalised textbooks at the two Government presses, yet the volume of this work is so big that the services of private presses have frequently to be utilised. And to do that, an arduous and lengthy procedure has to be gone through.

Some educationists have criticised the scheme of textbook nationalisation on another ground. They say that it is educationally unsound to prescribe just one book in each subject for all schools in the State. Even if it may be desirable to have just one language book in the case of Hindi, Punjabi and English each, we should have several books in other subjects, and the teachers should be given the choice to select the most suitable book for their purpose. The suggestion is sound in theory, but in practice it leads to an irksome multiplicity. Quite a large part of the population in the State is still not permanently settled after the Partition. There are frequent migrations of families from one district to another. If different schools make use of different sets of textbooks the hardship caused to parents can be well imagined. There has been a scheme under the consideration of the Education Department to have three books in each non-language subject for each class out of which any one may be made use of by teachers, but the adoption of this scheme has been deferred for some time to avoid hardship. There is yet another scheme of producing supplementary books in each subject for the use of above-the-average students in each class. This will meet the objection that as the uniform single textbooks tend to be of a low standard, the needs of the brilliant students are overlooked.

Publishers' offer

The publishers have recently made an offer to the Government to print and distribute the nationalised textbooks on behalf of the Government on suitable terms. They have asserted that because of their long experience in the line they can produce the nationalised textbooks better than any Government agency. They have further agreed to sell the textbooks, which, according to them, will be much better in print and get-up, at the same price as the Government is doing, and to pay a royalty of 5% to the Government. It may be mentioned in this connection that the experiment of getting nationalised textbooks printed and distributed through private publishers is already being tried out on a limited scale in the State. The nationalised textbooks for classes III and IV of the Pepsu schools are printed and distributed by private publishers on behalf of the Government and they pay the Government a royalty of 5 p.c. on the gross sale receipts. The manuscripts of these textbooks are got prepared by the Government like those of other nationalised textbooks and their copyright also vests in the Government. This system has also worked well.

Future of Nationalisation

As things stand, the question of discontinuing the scheme does not arise. In fact there has been a widespread and persistent demand in the State that the textbooks for High and Higher Secondary classes should also be nationalised so as to stop the corrupt practices of the publishers. Even the private publishers who criticise the existing scheme of nationalisation do not demand a reversal of the policy. They only want some modification in the scheme so that they too are associated in the production of nationalised textbooks. Again, despite the shortcomings and difficulties mentioned above, the scheme of nationalisation of textbooks has nowhere met with such a success as in our State. Nationalised textbooks worth over rupees two crores have been produced and sold during the last six years. The scheme has also been paying for the Government, though the amount of profit will be gradually reduced or spent on the supply of free textbooks to students of infant classes under the scheme of free and compulsory primary education.

The Punjab Advisory Board of Education has very recently set up a sub-committee 'to review the scheme of nationalisation of textbooks in the State and to suggest any modification required in the

(*Continued on page 38*)

THE GROWING NEED FOR GUIDANCE

Dr. Leo L. Nussbaum was a visiting professor to the Teachers' College, University of Mysore, during the academic year 1958-59 under the Fulbright Programme of International Exchange. During this year he visited a number of secondary schools, conducted workshops for secondary school teachers and directed a Career Masters' Course held in Mysore State. In this article he discusses the subject of developing guidance in Indian schools.

By

Leo L. Nussbaum,

Dean of the College,
University of Dubuque,
Iowa (U.S.A.)

There is a growing interest in educational and vocational guidance in India. Interest in guidance has existed for a number of years in the Ministry of Education, State Departments of Public Instruction, and among educational leaders. Some universities have started diploma courses to train guidance workers for secondary schools. Headmasters and teachers are showing an increased interest.

During my stay at the Teachers' College, Mysore, I directed the first Career Masters' Course held in Mysore State, under the joint auspices of the Director of Public Instruction and the Department of Extension Services of Teachers' College, University of Mysore. A group of 40 trained teachers from every district of Mysore State were deputed by the Director of Public Instruction for the course which lasted six weeks. Many of these teachers were assistant headmasters of large high schools but arrangements were made for each one to live in Mysore for the duration of the course.

These participants were quickly involved in discovering the nature of educational and vocational guidance. In teams of two they interviewed professional people, college students and students in the training schools to learn how each one had made his vocational choice. The participants had assumed that none would have made systematic plans for a vocation and then succeeded according to plan. But they discovered that those who had made the best professional progress and were most proficient had planned rather carefully. They learned that apparently proper job placement, job satisfacton and competence leading to promotion and advancement is related to systematic planning even before entering the high school. Some who had not planned systematically said that they wished they had done so.

These Career Masters are on the leading edge of a new movement in India. As part of their experience they completed case studies of boys whom they observed in their classes, at play, in their homes, in personal interviews. They administered tests ; they secured autobiographies from the boys ; they learned of their interests, their abilities and their limitations.

Industrial, economic and social progress in India is giving momentum to the development of organised guidance in education. Some of the factors are fairly evident and have a direct effect on the development of educational and vocational guidance, while others are more subtle and perhaps difficult to detect. To my mind there seem six underlying reasons for the need to develop guidance in the schools of India :

1. The development of the multipurpose high school
2. The increasing number of children in school
3. Increasing industrialisation
4. The creation of new and different

kinds of jobs
5. The increasing variety of technical training
6. The process of democracy at work in society

The Development of the Multipurpose High School

The development of the multipurpose high school is in itself a compelling reason for the development of guidance services. Students will be required to select from among certain available optionals. They will not be able to postpone all consideration of occupational choice until after high school because the choices of optionals will close certain vocational avenues and serve to open certain others. Choices of subjects which begin the direction toward a vocational choice should be made only with careful guidance. Guidance should take into account the individual student's ability, his aptitude, his personality, his interests, and his general academic achievement.

On the one hand the student should choose an option for which he is qualified, not one in which he is likely to fail. On the other hand he should choose the most challenging option for which he has the necessary qualifications. A trained guidance worker can use the various analytical tools to help the student make the best choices for him as an individual.

During the academic year I was at Mysore, I visited many high schools including several multipurpose ones. Headmasters in the multipurpose schools are facing unique problems as they attempt to serve pupils with many different vocational goals and educational objectives. Some headmasters believed that they could do no effective guidance at all because parents would insist on making all decisions for the child which relate to his education and his vocation. One headmaster, mature in years and a very dedicated school administrator, was more hopeful. He explained how he had already invited parents to the school to explain why a son or daughter was not qualified for certain course work but could probably succeed in other fields. He reported limited success but he was also confident that educating the parents held some promise of useful results in the long run.

The Increasing Number of Children in School

In some States fewer than fifty per cent of children enter the elementary schools. Those who enter the schools not only derive the benefit of formal education, but in a system where guidance services are available they also derive the benefit of individual guidance in and through the school they attend.

The Third Plan has within it a proposal to provide education for all students in the elementary schools of India. Guidance services may not be available in the elementary schools for some time. However it seems fairly certain that if all students are required to attend the elementary schools there will also be a marked increase of those who remain for some or all of high school education. So the number of students who will be exposed to guidance services in the high school will probably be several times as great as at present. Therefore, the high school and its guidance services will be in direct contact with a much larger number of students and their parents. But they will also be in contact with a much larger proportion of high school age youth. The guidance services can therefore significantly help to relate the individual abilities to job opportunities, and do so on a much larger scale than has been the case when a much smaller number of students attended school.

Whenever education becomes compulsory there is another aspect related to guidance. Compulsory education brings not only those to the schools who want to come, but also those who, if given free choice, would not come. Making education meaningful and relevant will have a double significance under these new conditions.

Increasing Industrialisation

India has embarked on a vast programme of industrial development. Such a programme

promises to bring about an improvement of economic condition of its people. But it will also bring vast changes in social conditions never experienced in the history of this country. Here we will deal with only one of these changes related to the guidance programme in the high school.

Industrialisation brings with it large factories and therefore large concentrations of labour. Some of these will be in areas which are very sparsely populated at this time. Therefore large numbers of people will be moving to the new factory areas. Some of these people will come from other states where different languages are spoken. Applicants will come from many social and religious communities. Out of these changes will arrive new blended communities where the older patterns of rigidity will tend to become flexible.

In guiding youth, many of whom will experience this within their lifetime, there must be preparation for such new developments. More people from the rural areas will be moving to larger cities.

Today more than seventy five per cent of the people work in agriculture. If the pattern which has obtained in other countries will also obtain in India, the percentage engaged in agricultural pursuits may fall below fifty per cent within two generations. For example, in the United States in 1870 about fifty per cent of the working population was engaged in agricultural pursuits. Today fewer than fifteen per cent are engaged in agricultural work, yet they produce far more than did the fifty per cent in an earlier period. Each new generation finds proportionately fewer job opportunities in agriculture.

Young people need to understand these changes ; they need guidance in making educational and vocational choices which take into account such basic changes which lie immediately ahead for them.

The creation of many new and different kinds of jobs

In an industrial economy which is expanding, many new and different kinds of jobs will be created. A simple agrarian economy may well have only ten, fifteen, or twenty different kinds of jobs. As the economy grows and becomes more complex, new kinds of jobs appear, sometimes at the rate of several hundred per year. There will be additional jobs in distribution, transportation, service establishments, in research. But this will be particularly evident in fields where there are new basic discoveries such as in chemistry, in electronics and in atomic and nuclear developments.

Students generally do not think in these terms. They think only of the occupations most common. If a group of first year high school students is asked concerning their vocational interests they are nearly always limited to twenty or thirty different occupations. Unless they are given guidance concerning the thousands of jobs about which they or their parents may never have heard, how can they choose effectively ?

At the present time India may have some 3,000 different kinds of jobs. In some of the highly industrialised countries of the world, the number of different kinds of jobs has increased to more than 20,000. The number in India is likely to approach this figure within the next ten years.

Lack of guidance often leads to serious shortages of qualified and prepared personnel in certain fields even in the *race* of vast unemployment in general. This is especially true since many of the highly technical and professional categories require years of preparation. Unless the guidance workers can anticipate the new fields of job opportunities when boys are in high school—not for that year, but for ten or more years hence—qualified personnel cannot be ready to step into the new jobs when they appear. High school boys and girls must always be thinking in terms of job opportunities, not of the present day, but some years in advance when they expect to be ready. In these new jobs lie some of the finest and richest opportunities for young people.

Needless to say, knowing current employment opportunities is also important for

those students who do not go to college, but go from high school directly into employment. For them up-to-date information concerning places of job openings, job listings and descriptions, and broad information concerning trends in the labour market are of great importance.

The Increasing Variety of Technical Training

Along with industrialisation come not only many new jobs, but also there will be much greater need for more technical training to qualify for the hundreds of specialised jobs. Some of this training will be done in special schools or technical institutes. Some will be carried on by government in short courses or evening schools. Some industries will have a training period believing they can more effectively train future employees on the job.

Guidance becomes especially important in knowing at what point in the educational ladder, so to speak, a student must be guided in terms of his vocational interests, abilities, and aptitudes. He must also have reliable information as to where certain types of job opportunities in his line are likely to be found. He must know how much formal education he should have before he seeks admission to these other training programmes.

Up-to-date information of this type is of the utmost importance. Often data which is a year or two old is no longer valid and accurate.

The Process of Democracy at Work in Society

Traditionally the son in India has asked his father for guidance in making educational and vocational choices. The father guided the son in terms of the occupations found in the family, community, or caste. There was a considerable stability in this pattern, the father knew the occupations open to his community. Accordingly, he advised the son. The son accepted the father's dictum, for in the society, this was the pattern. The father knew all the traditions, the limitations on the one hand, and the opportunities on the other. This worked in a relatively static and stable societal practice. For a vast majority, education was also given on the basis of community and caste. The education which was available did not essentially alter the vocational choices open to a boy. His status was largely determined by the accident of birth in time, place, and circumstance.

Now India is a democracy. When a nation becomes democratic, one of the early manifestations is often a constitution and a changed political order. There is representative government. And slowly the democratic process invades other areas of the societal pattern.

A person's future is no longer determined altogether by the accident of birth. He is not necessarily restricted to the status of his father and mother. If he possesses potential his status may be better than was his father's. If he has more formal education, he may find vocational opportunities not open to his ancestors who had perhaps neither education nor individual freedom of development.

The practical implications of such developments can be almost revolutionary. As caste and community limitations recede more and more into the background, many occupational choices will be made by both boys and girls which have not previously been practised in those groups. The sweeper's son may have ambitions to become a teacher or a physician or an electronics engineer. The Brahmin's son may want to become a bus driver. More and more as ability, achievement, aptitude, interests, and personality become the determining factors in educational and occupational choices, there will be less and less association of choice with caste or community.

This development will have many ramifications. Guidance workers will often be called upon by parents who are bewildered by the seeming unorthodox choices of their sons and daughters. At times guidance workers may have to interpret to parents such strange developments in their children. Sometimes they may have to help parents

and students understand that their ambitions are not realistic, that the probability of success is very small. At times they may have to defend the choice of the son or daughter as realistic in terms of abilities, achievement, aptitude, interests, and personality. Many parents will find such an approach to occupational choice very foreign and will need considerate and sympathetic help from the guidance workers.

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(*Continued from page 33*)

scheme to improve the quality of the textbooks. This sub-committee is busy collecting facts and figures and relevant data from various quarters. It will submit its report shortly. This report, besides providing a valuable objective study of the scheme of textbook nationalisation may be expected to guide the future policy of the State Government in the matter of textbook production.

'The shortest way to do many things is to do only one thing at a time.'

—*Cecil*

HOW DO WE SELECT OUR TEXTBOOKS?

Austin A. D'Souza,

Inspector of Anglo-Indian Schools, West Bengal, Calcutta.

Textbooks play an important part in education—in point of fact they play an almost too important part in Indian education, for instead of being merely a teaching aid to teachers and pupils as it should be, textbooks dominate the lives of both in our scheme of things. Therefore the task of selecting textbooks in our country requires greater thought and care for it is important to select the best possible textbooks for every subject. Ideal textbooks will perhaps never be available. Still it is up to those on whom the responsibility of selection rests, to choose the best available, because on their choice depends very largely the type and quality of education imparted in our schools.

Selection Procedure

Almost everyone will agree with me that the selection of school textbooks in India is for the most part a haphazard matter. Textbooks are usually chosen by examining bodies and university syndicates and occasionally by the State Departments of Education, individual headmasters or teachers. The State Governments generally prescribe and often publish the books for primary and middle schools; boards of secondary education for the secondary classes; and universities for the higher stages. At the school stage definite textbooks are recommended which are binding on the schools; at the university stage the colleges are generally free to choose textbooks according to the syllabuses prescribed.

What is wrong?

The practice of some central authority choosing a set of textbooks for use in all the schools under its jurisdiction ensures that all schools attain a certain uniform standard. Now, were such bodies staffed by experts who based their choice on sound educational principles, there would be much to recommend the system because the heads and teachers of many Indian schools have neither the time nor the ability to choose their own textbooks. Unfortunately, however, we find that the great power and responsibility placed in the hands of these centralized authorities is too often abused, deliberately or through ignorance. Often the individuals or committees who choose textbooks for schools have no sound idea of the basic principles that should govern the choice of suitable textbooks. Nor are they free from prejudice or other interested motives. Thus we find that they indiscriminately reject all foreign textbooks, an attitude which has already in many States done incalculable harm, for generally, even the poorest textbook from abroad is, in the organisation of its subject matter, print, get-up, illustrations and exercises, superior to the vast majority of textbooks produced in India—if we except the excellent productions of the Indian counterparts of well-established and experienced foreign firms such as Longmans, Blackies and Macmillans. By and large the textbooks produced in India lack in the quality of content, they are badly printed and they completely lack that quality of stimulus which should be the keynote of a good textbook. In making this comparison I am far from suggesting that we should put foreign textbooks on a pedestal or that the Indian textbooks are all worthless, but I do sincerely feel that until the products of our Indian publishers can compete with foreign textbooks on equal terms, it is surely pseudo-patriotism to encourage them to produce something so lacking in quality.

Another major and widespread defect in our system of selection is the corruption that prevails there. Otherwise, how else can

one account for the fact that in many cases books have been chosen which are far inferior to some others available which are better and even cheaper ? If their sponsors claim that the textbooks they have chosen are in their opinion the best available, then I think there must be something seriously wrong with their judgment.

Some Suggestions

In short, both the method of textbook selection in India and the actual textbooks selected leave much to be desired. To remedy some of these defects, I would like to put forward the following suggestions :

The textbook prescribing authorities, namely the departments of education, secondary boards of education, etc. should simply lay down the broad outlines of the syllabuses to be followed in schools without binding them down to definite textbooks. Wherever they feel that some guidance is necessary or where the headmasters and teachers want it, they should issue lists of all suitable textbooks on the subject and leave it to the school authorities to exercise their own choice in selecting the more suitable textbooks from among them.

Secondly, the main responsibility for the final choice of textbooks should vest in the school authorities who are the most competent to decide what textbooks are suited to their special needs. Also, in the schools all power should not be concentrated in the hands of the headmaster but should be shared by him with a small committee of senior teachers working under his chairmanship.

Thirdly, textbooks should be chosen on their own merits, by which I mean that educational considerations should play a much greater part in determining their choice than that of cost. Cost is ofcourse an important factor to be taken into account where poor children and schools with meagre resources are concerned. Perhaps in such cases the education departments should come forward to subsidise if necessary. There are some people who are of the opinion that a bad textbook is better than none. I for one cannot subscribe to this view and I firmly believe that if a teacher has to choose between a third rate textbook and none at all, I would rather think or say that he chose the second alternative.

And finally—this cannot be too strongly emphasised—the teacher, even if he has exercised some authority in choosing a textbook, should not become a mere uncritical mouthpiece of what is contained in the textbook. The best of textbooks are fallible like the best of men among us. Textbooks are excellent servants but very bad masters.

'The measure of a man's real character is what he would do if he knew he never would be found out.'

—*Thomas B. Macaulay*

SCHOOLS FOR THE GIFTED IN NEW YORK STATE

By

Kamala Bhatia

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THIS summer I went on a visit to the U.S.A. where I made a study of the programmes and facilities for the education of the gifted in the schools of New York State. I shall describe here a few of my visits to these schools which were planned by the Assistant Superintendent of Education, New York City Board of Education.

The New York City Board of Education (and Board of Higher Education in the case of two special schools : (i) The Bronx High School of Science and (ii) The Hunter College High and Elementary Schools) has a number of special schools for the academically talented, as well as some for those displaying talents in specialised fields. Among these I would like to mention the following :

1. The Hunter College High and Elementary Schools
2. The Bronx High School of Science
3. The School of Industrial Arts
4. The High School of Music and Art
5. The School of Performing Arts
6. The Brooklyn Technical High School

In addition to these, there are other schools where special programmes are provided for all students as well as for the academically gifted e.g. the Washington Irwing High School and several others. I shall describe briefly some of these special schools.

I. The Hunter College High School

This is a six-year institution for grades 7 through 12, and has approximately 1200 students. The school is for intellectually gifted girls and its programme is designed to advance educational planning, experimentation, and research for the gifted. Lorge-Thorndike Tests and Iowa Tests of Intelligence are used to test the intellectual capacities of the students, while the SRA—PMA are given to senior classes. Students enter the school at any of three levels, 7th, 9th or 10th grades. To be eligible to take the standardized entrance examinations at these levels, a student must be recommended by the Principal of the feeding school. Principals recommend according to (1) a certified I.Q. of 120 or above, (2) a high academic record of unusual ability or talent, (3) residence in New York City. The programme is both intensive and extensive. This means that the programme of studies has been upgraded to challenge and meet the fast learning rates of the gifted students. Each subject is therefore studied in detail e.g. Class 8th (average age 13 years) was studying the uses of Atoms and Neutrons, Einstein's equation $E = MC^2$ was quoted by a student during the course of the discussion in a class of advanced general science. Class 7th (advanced mathematics section) was doing basic modular clock arithmetic as applied to the solution of problems outside arithmetic. They used logarithmic tables with facility. The special features of the educational facilities in this school appeared to me to be :

(a) Careful, systematic testing and study of each pupil, primarily to aid the school's guidance service and educational guidance clinics to carry on their programmes for each individual pupil.

(b) Preparation of flexible and individualized courses and schedules of studies, based upon state requirements of minimum subjects, special interests and abilities of students,

and entrance requirements of the colleges selected for admission by the students.

(c) Grouping of the pupils according to interest or motivation in order to make the classes more meaningful and vital. For example, in some classes of mathematics and science, in addition to completing the regular college preparatory work desired, teacher will emphasise the research aspects of the subject because the pupils plan to specialize in research later, or are already employed in summer on part-time jobs involving the use of mathematics or science.

(d) Special arrangements of course sequences to give gifted girls a chance to do three years work in a given subject in two years. This applied to even grades 7, 8 and 9.

(e) A strong foreign language programme.

(f) Admission with advanced standing to classes at the junior and senior class levels of the school. Students with outstanding ability in three subject areas are given college work, sometimes by one teacher or by a team of teachers. In May of each school year, these students take special examinations given by the Educational Testing Service of Princeton, New Jersey, and those successful in these tests are given college credit or special college placement for this type of high school work.

Further experimentation into which the Hunter College High School is launching this year, and which is approved by the New York State Education Department for purposes of grant-in-aid are :

(1) establishing an honours course for pupils gifted in mathematics.

(2) demonstrating that a selected group of high school students, talented in art, music, dance, dramatics or creative writing, by working together to express a common idea, can, to a greater extent, than can be achieved in a traditional programme, stimulate one another to greater productivity. It can also broaden their concepts and raise their standards of creative work.

(3) construction of educational filmstrips for use in teaching intellectually gifted children.

This school seemed to have a fine faculty and bright, healthy, eager students. The atmosphere in the different classrooms I visited appeared to be surcharged with curiosity and intense effort and striving to learn and acquire knowledge. There were approximately 18 to 22 students in each class.

II. The Bronx High School of Science

The enrolment of this school is 2,550 and it is co-educational. It has grades 9, 10, 11 and 12 only, and is intended for the residents of New York City only. The faculty consists of 116 teachers, about 30 of whom have a doctorate in their special subject. The guidance department consists of one whole-time director, and fifteen part-time guidance-counsellors who are teachers and devote two periods daily to guidance work. Students whose certified minimum I.Q. is 135 or above, and who indicate high ability in science in their previous academic record, are eligible for admission and are given an entrance examination. Irving Lodge and Lorraine Diamond's Group Tests of Intelligence are administered to each student on admission. The building is a fine new one and of a unique design. The total cost of building and equipment is eight million dollars. The science laboratories have the latest and most elaborate equipment and materials. Apart from the junior advanced science laboratories, there are project-rooms in Physics, Chemistry and Biology, equipped with the finest science apparatus to enable the students to work independently on scientific research projects whenever they find time and wish to utilise them.

The curriculum of classes 9-12 consists of :

Compulsory Science Courses :—General Science (1 year), Chemistry (1 year), Biology (1 year), Science Techniques ($\frac{1}{2}$ year).

Other Compulsory Courses :—Mathematics (4 years), English (4 years), Social Studies (4 years), Foreign Language (3 years), Art Appreciation (1 year), Mechanical Drawing (1 year), Music (1 year).

Elective Science Courses :—Biological Laboratory Techniques (1 year), Field Biology (1 year), Home Technology (1 year), Advanced General Chemistry (1 year), Analytical Chemistry (1 year), Physics of Automotive Vehicles (1 year), Fundamentals of Radio (1 year), Advanced Science Technique Laboratory ($\frac{1}{2}$ year), History and Development of Science ($\frac{1}{2}$ year), Scientific Drawing ($\frac{1}{2}$ year).

An analysis of some of the compulsory courses indicate the advanced level of work required, e.g.

In Biology : The content and skills include processing glassware, preparing and using reagents and stains, bioculture methods applied to micro-organisms, chemical and microscopic methods of urine and blood analysis, making red and white blood counts. The students were working with such special equipment as hot air sterilizer, Arnold sterilizer, autoclave, oil immersion microscope and binocular microscope. Many of the biology sessions in the autumn and spring are held outdoors for field trips, for study of plants and animals in their natural environment. Students were photographing, maintaining and preserving organisms collected outdoors and were studying their ecological relations.

In Analytical Chemistry : In this course, theory and laboratory practice is given in studying qualitative and quantitative analysis for two double periods and one single period each week. Besides the study of metal and acid groups and general quantitative techniques, volumetric and gravimetric determinations were also taken up.

Volunteer Science Squads—Extra class science groups called squads are service clubs that provide an opportunity for selected students to enter into the actual science instruction. Students with a good science record are recommended by teachers for this squad. The students are assigned to special preparation rooms during free time. These squad members, are, in reality laboratory helpers serving a technical apprenticeship, yet at the same time they have an excellent opportunity to carry on projects of their own. Some of the Biology students who formed the Biology squad were seen doing independent work in bacteriology, histology, animal cancer, mold, protozoa and animal care, while some were making biological preparations for class instruction.

I learn that students who graduate from this school have often very bright careers at college and beyond ; some are now holding eminent positions as doctors, scientists, engineers and technologists, others have become brilliant mathematicians. In the nation-wide "Search for Science Talent" contest, this school has won many prizes and honours.

III. The High School of Music and Art

Two thousand students study in this school, which is a specialized secondary school for pupils who are talented in music and art. Entrance and aptitude tests in music and art are prerequisites of admission. The school attempts to develop the students' ability in music and art, either for professional or cultural purposes. There are facilities for the usual high school courses in compulsory language, social studies, sciences and foreign languages, but very special facilities, equipment and teachers for music and art. There is provision for vocal music, instrumental music and orchestra. Art education includes sculpture, wire modelling, blot designs, modern art, paintings in arts, tempera and water colour. Some of the teachers of art and music are professionals. The students were busy preparing for a grand exhibition at the end of the week, and exhibits in art, made by the students and displayed in the galleries were of a very high

order. The different orchestras were practising in various music rooms for a concert.

IV. The School of Performing Arts

There are 1500 students in this school, and a 4-year course in dance, drama and music is combined with a complete college preparatory course for talented individuals who are carefully selected on the basis of performance test results. The aim of identification is to find the boys and girls who, as adults, are likely to have talent to perform and to create something new in dance, drama and music. The students chosen on these traits are found to have an I.Q. of approximately 116. Selection is based on tests as follows :

Dancers—The audition for dance talent is in three parts. Pupils are first observed for basic techniques of talent, their bodily rhythm, co-ordination, foot patterns and arm patterns and their flexibility. Their physical structure is also evaluated to see their bodily proportions which should be almost perfect in the case of those who want to become professional dancers. There is then an appraisal for talent in performance regardless of skill in technique. The student should have a personality to which people respond. Only 20 per cent of the applicants pass this requirement, it was stated.

Actors—The faculty members mentioned that dramatic talent is shown best when students are most at ease. Consequently, the tests for dramatic talent are made as realistic, relaxed and enjoyable as possible. The first test is one-minute monologue from a modern play, suitable to the age and personality of the student. In the second test, the student is asked to read a script out of a play. He reads one part and another student of the school reads the other. The third test is the ability to improvise. A scene or situation is described, and the following qualities are tested : appearance, voice and diction, personality, reality of the situation, contact with partner, vitality and "outgoing" energy, intensity and "suppressed" energy, physical freedom, emotional freedom, imagination, acting impulse, and interpretation of the situation.

The teachers commented that even with the information collected from the performance tests, talent is not easily predicted in acting. Intelligent students rely too much on their intelligence, and not enough on their emotions which may be rigidly suppressed. Others are talented but too lazy or too uninterested to develop their talents. In some cases, talented students do not succeed, because of wrong early training.

This school is well-equipped with all the apparatus for teaching theatre arts, music and drama. It has highly qualified faculty for all high school subjects, and professionals or semi-professionals for drama and allied fields of performing arts.

B. Schools of Western New York

In Western New York the following school systems provided information basic to this report :

1. The Lewiston-Porter Central High School
2. Maryvale Drive Union Free Senior High School
3. Orchard Park Central High School
4. Kenmore Public Schools

Although I visited other schools too, these schools seemed to me to have programmes typical of the area.

1. *The Lewiston-Porter Central School* District is located in rural western New York. The district has an enrolment of approximately 2,700 children with about 1,000 of these in the secondary school programme. The high school offers a comprehensive educational programme of the type approved by the Board of Regents of the State of New York. The major emphasis of the programme is upon general

education rather than high specialisation in any one field of study.

In the sixth grade, children are observed and one group is selected to enter an enriched educational programme. The selection is based upon teachers' judgment as to the drive and potential of the child to participate in the programme. A child may have a highly intellectual capacity but not demonstrate it in the classroom. He would not be selected to enter the enriched programme. On the other hand, a child with less relative intellectual capacity but who shows interest in classroom work and has results which lead the teacher to think that he would be successful in the enriched programme would be chosen. Being selected for the enriched programme does not mean that a child will remain in it throughout the total secondary school programme. A student may be removed from the programme if he does not work up to his potential as determined by the teacher. Likewise, children may be selected for the programme in the upper grades should they demonstrate they could profit by entering it. Therefore, the retention in the enriched programme is flexible throughout the entire six years of school. In the programme teachers are selected carefully for their ability to teach. These children are given greater depth of educational experience and a wider variety of activities than other children. There are no special courses added for these students of the enriched programme.

The programme has only been in effect for a year and the administration and faculty are experimenting with the types of projects to be given to the students. No children in the programme have yet reached the upper secondary school grades and the programme will be designed for them as they get higher in the secondary school programme. The experimental quality of the programme and the newness make it difficult to evaluate it. One or two points however can be mentioned. The selection of the children is not based on any accurate test. The administration emphasises the weakness of trying to use tests as an exact measure of a child's potential. Therefore they have kept the programme as flexible as possible. Thus, the experiments that the children have in the enriched programme are not finalised but are being treated as experimental. The administrators and the faculty have open minds as to what kinds of activities constitute the enriched programme of the school and believe that changes may take place in the programme in the years ahead. A close watch is kept on the boys and girls in the programme to determine results.

2. *The Maryvale Drive Senior High School* is a school district adjacent to the city of Buffalo and can be classified as a highly populated suburban school district. There are approximately 2.800 children in the district with about 1,000 students in the secondary school programme. This district provides a comprehensive secondary school programme and has placed some emphasis upon vocational education. The commercial facilities, work experience facilities, and shop facilities are rather highly developed. In this school, boys and girls for the enriched programme, which comprises about one-third of the total group, are selected at the end of the sixth grade. A battery of selection devices have been used. These are (1) the teachers' judgment; (2) California Test of Mental Maturity; (3) California Achievement Tests; and (4) Social and Physical Factors. The supervising principal of the district along with the guidance personnel and the sixth grade teachers make the final decision about the selection to the enriched programme. The programme is flexible in that students may be dropped from it or added to it as they progress through the secondary school programme. However, in general the selection to the programme means that the child will stay in it throughout the six years of secondary school. In the programme, effort is made to allow freedom for the child to learn up to his capacity and the teachers give the children a wider and richer set of educational experience than in the other classes of the school.

This programme has been in effect for two years in the Maryvale Drive High School. The results of it are as yet not

conclusive. However, the administration and teachers seem to believe that children who enter the programme are having educational experiences which are more challenging than if they had remained in the regular classes. Likewise, they are finding that the teachers who also teach classes of a normal programme have been inspired to provide better educational experiences for all of their classroom activities and as a result better learning experiences are had for all the children in the programme. Thus the enriched programme has served as a device to stimulate other classes in the school. It is the plan of the Maryvale Drive School to test the achievement of the children using standardized achievement tests through the entire school programme. The school is cooperating with the University of Buffallo in such a testing programme and the first phase of the testing has been completed.

The major points about the Maryvale Drive enriched programme are: (1) the selection and (2) the evaluation of the achievements of the gifted child. Efforts are made in this school to use a variety of devices in the selection, testing, and observation of the child through the programme and there is evidence of a careful watch over his progress. As in the Lewiston Porter School district the programme is too new to draw any exact conclusions about the results of the efforts to provide an enrichment programme.

3. *The Orchard Park Central School* is a school district approximately 10 miles from the city of Buffalo. It has about 3,000 children enrolled in the school programme with about 1,500 in the secondary school. The Orchard Park Secondary School has for several years sectioned its pupils according to intellectual capacity, beginning in the seventh grade. The principal asserted that the upper two sections of eight could be classified as enrolling children considered to be gifted. The emphasis upon giftedness however was not entirely "intellectual" but rather it was recognised that a gifted person was one who had talent in a certain field. In the Junior high School Grades (7, 8, 9) the programme for the gifted children included special emphasis in Latin and in the sciences. When these children reached grade 10 they had opportunity to enrol in language and in the fields of mathematics and sciences that other children did not. The special language and science programme in Orchard Park School is comparatively new (2 years) and the idea is to expand the enriched programme to the fields of mathematics and the humanities. In this school, it might be observed, that although the gifted child has been recognised for several years and has been given enriched activities in the usual subjects that all children in the school enrol for, within the last two years efforts have been made to provide special learning experiences earlier so that when the child reaches the upper high school grades he can enrol in subjects which the ordinary child in the school is not ready for. In the Orchard Park School the school participates in the advanced placement programme of Princeton University and the gifted child receives the curriculum material of this programme in his classes. The special aspect of the Orchard Park programme seems to be in the fact that two subjects (Latin, Science) are now being introduced in grade 7 with the intent to replace these subjects with more advanced ones in the upper high school level.

4. *The Kenmore School District* is a large urban school district adjacent to the city of Buffalo. It has approximately 15,000 children in the district with about 5,500 pupils in the secondary school programme. There are several junior high schools and two senior high schools in the district providing for the secondary school programme. Efforts are made in the sixth grade of this school district to identify the gifted child through a series of tests administered by guidance personnel and through the observation of the classroom teacher. Once identified, the gifted child is placed in the section with others like him and he proceeds through the school programme. The junior high school programme is an Orientation Programme for the senior high school. The gifted child gets enriched kinds of activities in this orientation. Teachers are encouraged to allow the child to progress as fast and as far as he will in the class-

room activities. The administration and faculty stress the importance of the library and classroom facilities in the school. It has been observed that the classes for the gifted make greater use of the library and of special audio-visual equipment. The senior high school provides special sections for gifted children. Here also, a child going through the school programme is placed by guidance personnel in the advanced classes and a work schedule is given him through the high school programme to challenge his capacity. There are no special new courses which have been added to take care of the gifted. The special emphasis in this programme appears to be on guidance. In this school district great care is given through a guidance testing programme to select the child, and once in the programme every effort is made to provide special facilities to enable him to get as broad experiences as possible.

Some observations

A general observation about all the schools visited in New York State is the newness of them. School administrators and teachers are evincing special interest and making special efforts for the gifted. The programmes are all classified by the administrators as experimental. In no instance was any administrator certain that his programme would be truly effective. Administrators are proceeding with caution. Standardised tests are being widely used. Teachers are being selected with care to teach the children. Efforts are being made to make the programmes successful. There seems to be a carry-over from the programme for the gifted child into the regular programme of the school and teachers are recognising that what is good for the gifted is also good for the ordinary child.

A television programme sponsored by the University of Buffalo on June 20, 1959, entitled the "Gifted Child" (University of Buffalo Round Table) pointed out the fact that the gifted child may do just as successful work when grouped with other normal children in a classroom as when he is isolated into a separate class. Emphasis appears to be upon instruction providing greater depth of study and knowledge rather than giving widest kinds of experiences. Finally there seems to be uncertainty about the definition of the term "gifted". To many principals it means having intellectual capacity (I.Q). To others it meant having a talent in one area. To still others it means having an ability in all fields of endeavour.

'The modulation of the voice is as necessary as the training of the hand. Physical drill, handicrafts, drawing and music should go hand in hand in order to draw the best out of the boys and girls and create in them a real interest in their tuition.'
—*Mahatma Gandhi*

We publish below accounts of individual projects undertaken by various schools. Contributions (which should be typed) for this feature are invited. These should be addressed to the Editor, "Secondary Education", *Ministry of Education, New Delhi.*

I

Teaching of Mathematics in Secondary schools

By R.S. Lugani, Teacher, King George's School, Ajmer.

THERE is no doubt that a vast majority of our students have a general aversion for mathematics. This fact is also apparent from the various Secondary Education Boards' results in which one can see that mathematics as one of the subjects accounts for a large number of failures.

This is a serious matter, for mathematics is an important subject and its importance grows daily with the advance of science and technology. It is, therefore, necessary that educators should look more closely into this problem and try to find a solution to it.

Mathematics at the Secondary Stage

It is my opinion that the teaching of mathematics at the secondary stage should be watched with great care and properly developed because it is at this stage that the child begins to show signs of his potentialities and the direction of his aptitudes. Mathematics in secondary schools is divided into two parts : (a) General Mathematics which has to be studied by all students and (b) Additional Mathematics which is meant for those who have an aptitude for the subject and wish to continue its study further after school or want to offer a career where mathematics forms an integral part of the knowledge to be acquired. I will, in this article, deal mainly with the teaching of General Mathematics which prepares the ground for further study and discuss the whole problem under the following heads :

1. Methods of teaching
2. Curriculum
3. Examinations
4. Textbooks and help books

Methods of Teaching

The students' aversion to mathematics is, in my opinion, mainly due to the teacher's wrong handling of the subject. Some teachers teach the subject along strictly conventional lines—their approach is altogether too formal, too academic. On the other hand, there are some teachers whose teaching is either too fast which makes it difficult for average and below average students to catch up or it is too slow which makes the subject dull and tedious for the bright students of the class. In short, the students' dislike of the subject is essentially due to wrong methods of teaching.

The main point that a good teacher of mathematics should keep before himself is to look into the problem of individual differences in his class and adjust his teaching of the subject accordingly. Perhaps it would be desirable from that point of view

to split the class into two sections : (a) a stream consisting of average, above average and outstanding cases and (b) a stream consisting of below average and backward and weak cases. This kind of grouping would enable him to draw up a programme of planned teaching suited to the mental make-up of nearly all the boys.

Having divided his class thus, the teacher can now turn his mind to the treatment of the subject. So far we have thought of mathematics suitable only for classroom teaching. But there are many situations which a resourceful teacher can exploit for teaching his subject through activity. Some of the situations that lend themselves to outdoor methods of study are : (1) project around a visit to a post office, (2) project for finding out the price structure in metric weights with decimal coins and comparing it with present weights and old coins, (3) finding the width of the stream, (4) finding the height of a tree or height of a hill by its shadow or with the help of trignometry, (5) graphs showing sunrise and sunset, temperature graphs, atmospheric graphs, pressure graphs, etc. and (6) finding the area of an irregular field by dividing it into sets of triangle.

I have seen boys take keen interest in measuring each other's height correct to a millimeter, weighing articles correct to centigram, All these methods that I have suggested above would serve as a good introduction to the teaching of mathematics through project methods of study.

Another extremely effective method of enlivening the subject is to introduce in its teaching an element of historical interest. For example, I have noticed that students love to listen to life histories of great mathematicians like Ramanujam, Carden, Newton, Leibniz, Euler. They are thrilled to hear the history of inventions of zero, metric system, decimals, "Napier bones" (logarithms) etc.

Diagnostic Teaching

Then there is the method of diagnostic teaching which requires that a teacher should, in the course of the lesson or while correcting his pupils' work, make a note of their difficulties and discuss them with the class at length. If the difficulties are common to all, these should be discussed in the class. But if the difficulties are confined only to a few students, the teacher could discuss them outside class hours so that the whole class is not held up for the sake of a few. This method has two distinct advantages—(a) it helps the teacher to anticipate the difficulties of his pupils in the study of further topics so that he can devise ways and means to overcome them and (b) it helps him to prepare his lessons with some system, that is, he can make a note of such topics as will need special treatment or further explanation. Generaly speaking, diagnostic teaching will reveal the following types of general mistakes that the students usually make :

Errors in computation : The introduction of metric system in money, weights and measures has simplified the study of fractions and has replaced it by an easier method of the decimal system However, even here, diagnostic teaching may reveal that errors in computation e.g. in decimals, may be mostly due to (a) mistakes in placing the decimals in multiplication, (b) difficulty in rendering the denominator as a whole number in decimal division, and (c) fixing zero in quotient etc.

In solving the difficulties of students, a good teacher would do well to enlist the cooperation of a few bright boys because that would be a further stimulus to these boys to work better and it will keep the whole class active and attentive.

Mistakes in takiny down questions properly : This usually is due to inattentiveness. Mathematics needs concentration and anything like a wrong posture or an external distraction may cause disturbance.

Weakness in a dependent topic : Good grounding in the study of equations, profit and loss, volume, etc. is the outcome of good comprehension in dependent topics like simplification of fractions, percentages. areas, respectively. Therefore, a teacher should

solve difficulties in the dependent topics before going ahead with the syllabus.

Carelessness : Badly done and slipshod written work is irritating and exhausting both for the teacher and the pupil. It is therefore necessary to curb tendencies of bad working at the very outset. To do that, a teacher should give separate marks for neat systematic work at least in the early stages so that neat work becomes a habit with the child. Another important habit that should be developed in the student is the habit of working out all the steps of a question in the notebook. Some boys do the question quickly and omit a few steps. This tendency should be discouraged because (a) a student is likely to overlook a step in complicated questions and (b) oral working done hurriedly can be wrong.

Formulae : The frequency with which formulae are used often springs from the ease with which they are readily presented by the teacher and accepted by the students who often regard them as the method to be used indiscriminately in solving any and every problem. In the initial stages, therefore, the teacher should not give any formula but let the child work out all the questions step by step, even if it involves some amount of tedium. It is only when the students have grasped the basic principles of mathematics that a few basic formulae may be given. All inverse forms that grow out of them should be avoided. Consider for example, the following :

Basic formulae

(i) $I = \frac{P \times R \times T}{100}$

P = Principal
R = Rate
T = Time

Inverse formulae

$$P = \frac{100 \times I}{R \times T}$$

$$R = \frac{100 \times I}{P \times T}$$

$$T = \frac{100 \times I}{P \times R}$$

$$P = \frac{100 \times I}{100 + (R \times T)}$$

(ii) $(a+b)^2 = a^2 + 2ab + b^2$

$a^2 = b^2 = (a + b)^2 + 2ab$
$a^2 + b^2 = (a + b)^2 - 2ab$
$4ab = (a + b)^2 - (a - b)^2$
$a^2 + b^2 = \frac{1}{2}(a + b)^2 + (a - b)^2$
$(a + b)^2 = (a - b)^2 + 4ab$
$(a - b)^2 = (a + b)^2 - 4ab$

In these two instances all the inverse forms given grow out of the basic formulae given on the left. To remember them all is a waste of effort and time and overcrowds the brain with unnecessary facts. Every formula that is given should be accompanied by sufficient drill.

Curriculum

The present curriculum for mathematics at the higher secondary stage is, in my opinion, narrow and needs to be revised. I will make a few suggestions here to indicate broadly how it may be revised.

In elementary mathematics the emphasis, as we know, has shifted from fractional to decimal treatment. This has already simplified matters to a great extent. To enlarge the scope of elementary mathematics, I will suggest that there should be an exhaustive inter-relation of mathematics with other subjects and topics like graphs, density, specific gravity, coefficient of expansion etc. In Algebra at the elementary stage, topics like formulas expression, arithmetical generalisations, graphs, etc. should be included in the syllabus.

As far as additional mathematics is

concerned, the subject at present includes only (i) co-ordinate geometry (straight line and circle), (ii) trignometry, (iii) algebra, quadratic equations, progressions, binomial theorem.

This group seeks to cater for those offering mathematics for higher studies. But there are other groups of mathematics which could profitably be included in general mathematics. This would result in a better intake of professional knowledge for those who pursue different careers where mathematics forms a part of study. These are (i) mechanics (simple portions), (ii) statistics (elementary portions), (iii) calculus up to maxima, minima only (elementary study), (iv) those portions of astronomy which would be helpful in the study of Naval mathematics and also correlate geography with mathematics, (v) solid geometry (some basic ideas).

With careful planning this syllabus could be so arranged that the brighter streams of boys may finish their elementary mathematics in the 10th year and do additional mathematics in the final year.

Examinations

At present the question papers set in our examinations contain routine questions which are frequently repeated year after year with little or no variation. It therefore happens that students whose only worry is to pass the examination, adopt themselves to its demands and get used to type questions. The result is what one expects. The whole purpose of the study of this subject which is to develop reasoning and reflective attitude is defeated. The second major fault of our examination system is the practice of giving far too much latitude in the choice of questions in the paper. This is the fault not so much of the paper setter as of the various examination boards who issue these instructions. Consider, for example, the following question paper issued by a certain examination board.

'The first part will contain three questions in Arithmetic and three questions in Algebra and the second part will consist of six questions in Geometry. Candidates will be required to attempt seven question in all from both parts.'

According to these instructions the students may choose to study arithmetic and geometry, exclude algebra altogether, and also exercises from geometry and yet pass creditably!

About such examinations I would briefly say :

(i) The test does not provide a comprehensive measure for guiding students' abilities.
(ii) It aims at judging only a part of knowledge in a given subject.
(iii) These tests only perpetuate certain types of questions and do not therefore develop the students' insight into the study of the subject or promote intelligent thinking.
(iv) They hamper serious study of the subject.
(v) They promote selective study.
(vi) They encourage mechanical attitudes in students and by offering easy success, induce them into a false sense of success.

Textbooks and help-books

The seventh point which I have not made above, because I want to say a little more about it, is the evil of help books these examinations perpetuate. There is any number of help books in the market these days with fancy titles offering ready solutions and a short-cut to students through their examination worries. Much as we may deplore it, we know very well that our students rely more on them than their textbooks. It is heartening to know that the Punjab University has come out with a bold measure of reform by banning the authors of such books from accepting offers of profit under the university, like marking papers etc.

On the other hand, our textbooks are hardly any better. We find that usually the textbooks, instead of presenting the material as they do at present, should be so designed that graded questions appear as

sets of different assignments. How the textbook is used by the teacher is also another very important point. For example, a good teacher will make a judicious selection of questions from the book depending upon the ability and understanding of the students.

I have no doubt that if teachers of mathematics were to follow the suggestions I have made above, the subject would lose a great deal of the irritation it causes to both teachers and pupils at present.

II

News Reading as a Co-curricular Activity *by S. K. Jha, Janata Secondary Teachers' Training College, Chanda.*

IN this world of ours which is like a house divided against itself, the primary need of mankind is to develop a spirit of internationalism which Dr. Kandel has described as "that faith which is based not on emotion or sentiment, but arises from an appreciative understanding of other nations as well as our own, from the sense that all nations....are contributing, each in its own way, to the work and progress of the world, and from a realization of the ambitions and ideals which each nation is endeavouring to hand on."

Now, how are we to build up such an international attitude ? And where are we to make a start ? Or rather we should reverse these questions and ask—where and how ?

Since learning is easy when the mind is still flexible, the answer to the first question is—begin with the child. Thus the main problem before us today is to make a conscious effort at an early stage of a child's education to give him the right understanding of human values and to see that he understands the working of the various forces that lead the world in one direction or the other. In other words, we have to make a beginning in our schools.

The next question is—how are we to go about our task of inculcating this kind of attitude in the school children ? At this stage I must make it clear that the school where this beginning can be made has to be a secondary school where a pupil is old enough to have attained some maturity of comprehension, and has acquired some background in reading and writing. No doubt the textbooks prescribed in our secondary schools do often include literary pieces by authors of other countries, and such reading does promote an understanding of the culture of other countries. But this is not enough. We must introduce in our school curriculum a regular programme of news telling or news reading which should form part of the school's many other literary co-curricular activities.

The first step towards this end is to equip the students' reading room with a number of standard newspapers, periodicals and magazines in the regional languages, Hindi and in English and the pupils should be asked to maintain a notebook for taking down such news or articles of special interest to them which they would like to tell others. A human being has an innate tendency to communicate his knowledge and experience to others, a fact which has been an important factor in the evolution of speech and language. And this tendency is more marked in a child than in a grown-up. It is therefore important to exploit it and direct it to a useful end.

The newspapers and magazines selected for children's reading should, beside including varied information, contain that literature which we think would have a good influence on their minds. It is for this reason, I think, that newspaper publishing agencies should publish children's papers separately. These papers should have articles and news items in a language simple enough for an average child to understand and the aim of the contents should be to educate. We have a number of children's magazines in the country but they can hardly be said to be suitable for educational purposes.

Having got together a collection of suitable newspapers and periodicals, the next thing we should do is to allot regular periods for news reading in the school's daily time-table for different classes. Every class can include this item in the schedule

according to its convenience. After the news is read, the students should be made to discuss it and offer their comments. To ensure that the programme is planned in the right way, there should be an editorial board consisting of all the class teachers whose work will be to select and edit the news for their own classes. This editorial board should co-opt some other teachers also so that at least one teacher is taken from the science section and one from the social studies section. This kind of planning is necessary if such a programme is to achieve any constructive results. I know of one school that has included this programme in the school's regular activities but does not give any thought to its planning. There is no selection of news and there is no editorial board and no editing of news to be read. The result is that everything proceeds mechanically and the children derive no positive benefit from it.

Another advantage of this kind of activity is that it can provide very good training to pupils in democratic life. A free discussion of current events always has the effect of enlightening and quickening one's thinking faculties. This would also stimulate students' interest in further reading. Wherever possible, the pupils should be allowed to use maps, charts and other aids to express and explain their points e.g. a boy may be encouraged to show on the map the location of the town where the incident that he relates has happened. Similarly, if he is talking about something of which there is a picture or illustration, it should be shown to the whole class.

I have no doubt that this activity, if planned with intelligence and imagination, can be highly educative and effective in promoting an international sense among students.

III

My First Excursion *By Mrs. Joginder H. Singh, Teacher, Bangla Sahib Girls' Higher Secondary School, New Delhi.*

THIS was my first excursion in more ways than one. I had never taken my students on an excursion before, nor had I been taken on an excursion myself when I was a student. Such knowledge that I had of organising excursions came from some American books on audio-visual education that I had read.

My school has only recently been raised to a higher secondary school. I teach Botany which has also been recently introduced as a subject in the school curriculum. We have no green house of our own, nor any collection of plants in the school. Before this excursion the only acquaintance that my class had with flowers and plants was through the reproductions of magnified cross-sections of stems and roots in their textbooks, all of them not even good illustrations.

In the first term the girls were busy with their textbooks. When we entered our second term, I thought it was time that the students should see the flowers and plants they had read about to get a background for further study. So we decided to go on an excursion to a nursery.

Attending to Preliminaries

Our school has the good fortune of being very conveniently situated. It is in New Delhi, situated within walking distance from a post office (the Gole Post Office), a police station (Parliament Police Station), a radio station, a bank, an insurance company, a church, a market (the Gole Market), a poultry farm (in the Gole Market), a hospital (the Wellingdon Hospital), a museum (the Rashtrapati Bhavan Museum), the Parliament House and the Central Secretariat. Organising excursions to these places is therefore very easy because we have not to worry about transport or lunch or having to incur any extra expense.

The nursery where we had this excursion is only 20 minutes' walk from the school. When I talked about my idea to the class, they were extremely enthusiastic. They could hardly wait for the day. But I had to make preparations for the excursion or else I knew a haphazard trip would yield no lasting results.

Preparations for the excursion went off without any difficulty. As the nursery was so near the school, it was not necessary for me to write to them or telephone them. I just went there two days before the excursion and talked to the *mali* who was hesitant at first and did not know whether he should permit this visit or not but when I convinced him that there was absolutely nothing in the purpose of our visit except to learn about the plants and flowers at the nursery, he agreed. After that I went round the nursery and took down notes of the plants to be shown to the girls, which could be omitted, the time the nursery opened, the time it closed, etc.

My next worry was to adjust my teaching schedule in such a way that the excursion caused as little disturbance as possible to the rest of the school and the class going on the excursion. The trip needed two hours in all—about one hour or so in the nursery and about 40 minutes to walk to it and back. I therefore decided that we should leave the school at 3.15 p.m. and come back around five in the evening. This would disturb just two classes. The excursion group would miss their language class and I would not be able to teach science to another class. This arrangement was the best possible for all concerned.

My third step was to prepare the students for the excursion. They had to be told where they were going, why they were going, what they had to do at the place of the visit etc. After that we revised the lesson on the classification of plants and the students prepared a list of representative plants in each group. They were also told of the plants they would be able to see at the nursery. We rounded off our preparation by a short discussion. All this lent an air of keen expectancy to the occasion.

At the nursery

On the appointed day we set out on our trip and reached the nursery within 20 minutes. The *mali* welcomed us and acted as our guide throughout, taking us around and telling us the names of most of the flowers and plants. The girls noted down these names in their exercise books. They asked questions, observed everything minutely and drew diagrams of stems and leaves. Many girls were intrigued to see the pine apple and mango plants which they had never seen before.

The visit was extremely satisfying. We could not collect samples of plants and flowers for that was against the rules. But we had indeed collected a good deal of information about the nursery. The students had now seen what a nursery was like and how the plants were grown and preserved. The black and white diagrams they used to see in their textbooks had suddenly come to life.

Follow-up

Back in the classroom we had to consolidate our notes and our experiences. Each one of us tried to recapitulate what we had seen. The girls re-did the drawings of plants and leaves they had sketched in the nursery to make an album for the class. Since our visit to nursery, girls have collected many plants and leaves and they have brought to the classroom nearly all the plants and flowers that they studied at the nursery.

The most valuable result of this excursion, to my mind, is the keen interest that my students have started taking in the subject. There is never a dull moment in our botany class now, for the girls are consstantly asking questions.

Activities at the Centre

Third Five-Year Plan for Secondary Education

THE Committee on Secondary Education appointed for finalising the draft Third Five Year Plan for Secondary Education has estimated the total value of the Plan at Rs. 123 crores.

The Committee has divided the Plan into four conventional groups of schemes : (a) Central Schemes (b) Centrally sponsored Schemes (c) Centrally aided Schemes and (d) State Schemes eligible for Central assistance.

Committee on Moral and Religious Instruction

The membership and terms of reference of the Committee set up in pursuance of the recommendations of the Central Advisory Board of Education at its 26th meeting in January, 1959 to make detailed study of the question of religious and moral instruction in educational institutions have been finalised. The Committee will consist of :

1. Shri Sri Prakasa, Governor of Bombay. (Chairman)
2. Shri G.C. Chatterjee, Vice-Chancellor, University of Rajasthan, Jaipur.
3. Shri A.A.A. Fyzee, Vice-Chancellor, Jammu and Kashmir University, Srinagar.
4. Shri P.N. Kirpal, Joint Secretary, Ministry of Education (Member-Secretary)

The terms of reference of the Committee are :

(a) to examine the desirability and feasibility of making specific provision for the teaching of moral and spiritual values in educational institutions ;

(b) If it is found desirable and feasible, to make provision for : (i) defining broadly the context of instruction at various stages of education and (ii) considering its place in the normal curriculum.

Inter-State Understanding

In order to encourage Inter-State Understanding, a rally of selected students from high and higher secondary schools from all over the country is proposed to be held on the occasion of the next Republic Day celebrations. Towards this end various high and higher secondary schools of the country are being supplied with a copy each of the publications : 'A Guide to West Bengal and Assam' and 'A Guide to South India'.

Promotion of Gandhiji's Teachings in Schools

Arrangements have been made for lectures on Gandhiji's philosophy and way

of life by Kumari Manuben Gandhi in selected schools of Madhya Pradesh and Uttar Pradesh.

It has also been decided to distribute a Unesco publication entitled "All Men Are Brothers" to all the high and higher secondary schools in the country. This book is a selection of Gandhiji's sayings and writings.

Exchange of Cultural Delegations

The Government of the U.S.S.R. have accepted India's offer to welcome a delegation of educationists from that country. The delegation which is to consist of six persons is expected to visit India in December 1959 for a period of three weeks.

Lawrence Schools

The Government of India have appointed Dr. V.S. Krishnan, Vice-Chancellor, Andhra University and Shri G.D. Sondhi of Sabathu (Simla Hills) as members of the Board of Administration, Lawrence School, Lovedale and the Board of Governors, Lawrence School, Sanawar, respectively for a period of three years.

Research in Problems connected with Secondary Education

The following grants have been sanctioned for Research in problems connected with Secondary education during the quarter ending September, 1959 :

S. No.	*Institution*	*Research project*	*Amount sanctioned*
1.	David Hare Training College, Calcutta.	A comparative study of "Trained Vs. Untrained teachers in respect of teaching efficiency"	2,001
2.	University of Nagpur	Achievement tests for some electives at the High school stage	1,017
3.	Government Junior Basic Training College, Muzaffarnagar.	Construction and standardisation of art appreciation tests	2,450
4.	Indian Institute of Technology, Kharagpur.	The effectiveness of the Board and University examinations in India and suggestions for their improvement	30,439
5.	Sri Ramakrishna Mission Vidyalaya Teachers' College, Coimbatore.	i) A study of the socio-economic conditions of High school students in Coimbatore District ii) The causes of resistance to B. Ed.	4,513
6.	University of Allahabad.	i) A survey of the load of work on Secondary school teachers. ii) Causes of failures in High School Examination in Uttar Pradesh	8,622
7.	Prantiya Shikshan Mahavidyalaya, Jabalpur.	Construction and standardisation of differential aptitude test battery	3,450

S. No.	*Institution*	*Research project*	*Amount sanctioned*
8.	D.S. College for Women, Ferozepur.	The utility of school broadcasts and the ways and means to make these more effective	2,202
9.	University of Poona.	Visual Education	1,364
10.	Visva-Bharati, Santiniketan.	Preparation of standardised attainment tests in different school subjects	2,588

Assistance to Voluntary Educational Organisations working in the field of Secondary Education

The following grants were made to Voluntary Organisations working in the field of Secondary education during the quarter :

Name of the Institution	*Amount sanctioned*	*Purpose*
	Rs.	
1. Jamia Millia Islamia, Jamia Nagar, New Delhi.	20,000	Establishment of Science laboratories and improvement of library in connection with the conversion of Jamia Millia Higher Secondary School into Multipurpose Higher Secondary School
2. Sri Avinashilingam Home Science College, Coimbatore, Madras State.	50,000	Establishment of Home Science College
3. Vidyalaya Girls High School, Thyagarajanagar, Madras.	50,000	Construction of building for the school
4. Rashtreeya Vidyalaya Teachers' College, Rashtreeya Vidyalaya Road, Bangalore-4.	35,000	Construction of a building for Rashtreeya Vidyalaya Teachers' College and Practising High School
5. Ramakrishna Mission Ashrama, P.O. Sarisha, West Bengal.	6,100	Extension of the existing High School building, purchase of furniture etc.
6. Fatima Girls' Multipurpose High School, Kazipet, Andhra State.	3,662	Purchase of furniture and books for library
7. Gujarat Research Society, Lalit Kunj, Khar, Bombay.	13,171	Psychological Research Institute

8.	R.M. Trivedi New Education High School, Ahmedabad.	1,632 Purchase of books for library, laboratory etc. for the improvement of teaching in the School
9.	Mahbub College High School, Rashtrapathi Road, Secunderabad, Andhra State	2,000 Construction of a building
10.	Prakash High School for Girls, Relief Road, Bombay State, Ahmedabad.	3,000 Improvement of Home Science Section of Prakash High School for Girls

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Miscellaneous Grants

A grant of Rs. 8,100 has been sanctioned to Dr. Graham's Homes, Kalimpong, towards the Government of India contribution for 1958-59.

A grant of Rs. 4,282 has been sanctioned to Inter-State Board for Anglo-Indian Education, New Delhi, towards the Government of India's contribution for 1958-59.

A sum of Rs. 55,000 has been paid to the Lawrence School, Lovedale, as the first instalment of the Government of India's contribution for the year 1959-60 for the orphan children of the British Officers who left India after independence.

Central Institute of Education, Delhi

Seminar on Audio-Visual Aids

The Department of Extension Services of the Institute organised a seminar on "Audio-Visual Aids and Their Use", on 21st August, 1959. Fifty one teachers from various schools of Delhi participated in the Seminar. The Seminar discussed the following topics

(i) The 'what' and 'why' of audio-visual aids to education.

(ii) Sources of audio-visual materials.

(iii) Audio-visual aids and equipment.

(iv) Utilization of audio-visual materials.

(v) The services rendered by the National Institute of Audio-Visual Education in the field of audio-visual aids.

Seminar on School Health Practices

The Department of Extension Services of the Institute also organised a seminar on "School Health Practices" on 28th and 29th August, 1959. Mrs. A. Moore, W.H.O. Health Education Consultant to the Ministry of Health, Government of India, directed the Seminar. Fifty four teachers from various schools of Delhi participated in the Seminar.

The purpose of the seminar was to help teachers solve the problems which they were facing in carrying out desirable school health practices and to enable them to provide healthful school living, health services and sound health instructions to the students.

The discussions during the seminar were based on the problems which were collected by the Coordinator of Extension Services earlier from the heads of the participating schools. The problems were categorised and further grouped and sub-grouped under six relative heads, viz., (1) Healthful School Environment (Healthful School living), (2) School Health Services, (3) School-Home-Community Relationships, (4) Nutrition, (5) Personal Health Practices, and (6) School Feeding : (mid-day meals, school lunch, etc.).

Other Seminars

The following two seminars were also held during the quarter under review :

(a) 'Education for the Gifted Child'

guided by Mrs. Kamala Bhatia, Principal of the M.B. Girls Higher Secondary School, New Delhi and Shri P.K. Roy, Lecturer at the Central Institute of Education, Delhi.

(b) 'Teaching of Social Studies' guided by Sarvashri B. N. Pandey and S.N. Katiyar.

Symposium on Gandhi's Life

The students of the Institute held a symposium on Mahatma Gandhi's life, work and teachings. The subject of the symposium was 'Revolution through Basic Education'.

Educational Excursion

A party of 28 students and 3 members of the staff went on an educational excursion and visited Bombay, Poona, Khadakvasla, Aurangabad, Ajanta and Elora Caves, Jalgaon, Sanchi, Gwalior, Agra, etc.

Central Institute of English, Hyderabad

The sixth meeting of the Board of Governors of the Central Institute of English, Hyderabad, was held at New Delhi on 3rd August, 1959.

The second course at the Institute commenced from 17th June, 1959.

Central Bureau of Educational and Vocational Guidance

During this quarter the Bureau concentrated mainly on the psychological tests for the selection for the Government of India Merit Scholarships in Public Schools. The screening tests for the Delhi Administration were conducted and psychological tests for the final selection were prepared and sent to the various centres.

Work on the other projects of the Bureau continued. The staff of the Central Bureau of Educational and Vocational Guidance participated in various seminars on subjects relating to guidance held in Delhi.

Central Bureau of Textbook Research

Preparation of an Integrated Syllabus

The Bureau completed an integrated syllabus for the Delhi Directorate of Education. The syllabus is common to both basic and non-basic schools in the Delhi area and is meant for their use. The project was undertaken as a 'Group-project' for the first time in India and it has been worked out in cooperation with the teachers of the respective classes. The Bureau has prepared a report on this new experiment for the information and guidance of other States.

Project on the Teaching of the United Nations in Schools

The 23 lessons prepared by the Central Bureau of Textbook Research on the United Nations have been highly appreciated by the U.N. Headquarters in Paris and seven other specialised agencies of the U.N. A request from the National Education Association of the U.S.A. has been received recently for permission to reprint some of these lessons with due acknowledgement to the Ministry of Education. The matter is under consideration.

Research

Work is in progress on the following subjects :

(1) (a) An experimental project on the principles of addition in the primary classes in some of the Delhi Schools.

(b) Hints to authors of Social Studies.

(c) Preparation of Analysis Sheets for the middle grades in various school subjects.

(2) A study of Addition Combination in Arithmetic Textbooks for class 2 :

This study aims at assessing the quality and quantity of drill load on 'Addition Process' in the Arithmetic textbooks for Class 2. As many as six textbooks used in Primary schools in Delhi have been selected for study. Practical suggestions on measures

for quickening habituation and simple corrective measures to be included in different textbooks will be made.

NEWS AND NOTES FROM THE DIRECTORATE OF EXTENSION PROGRAMMES FOR SECONDARY EDUCATION

Seminar on Science Teaching

A five-day All-India Seminar of Science teachers who had received special training under a Government of India scheme for the strengthening of Science teaching, was held at the Central Institute of Education, Delhi.

The seminar made the following recommendations :

(1) The Government of India should appoint a Commission of Science Education in India with the following objectives :

(i) to review and evaluate the present programme in science education in the country ;

(ii) to recommend a comprehensive programme of Science education at all levels ;

(iii) to identify and assign priorities to problem areas in Science education ;

(iv) to propose suitable studies and developmental programmes to be undertaken by science teachers with a view to solving specific problems ;

(v) to lay down guiding policies for the selected projects ;

(vi) to recommend to the Government the composition of a permanent organisation for the purpose of :

(a) constantly reviewing and evaluating the programmes and their progress ;

(b) disseminating the results of such projects ;

(c) developing suggested guide lines or recommendations of such basic problems as :

(1) curriculum in science

(2) professional education of science teachers

(3) certification of science teachers

(4) evaluation of results of science instruction.

(vii) for promoting publications of high quality and content, necessary for the upgrading of science teaching.

(2) A Central Institute of Science education be set up to develop a valid body of knowledge and thinking in the field of school science education and to help in training the required personnel for science education by means of regular vacation and part-time courses. Such an institute would also carry out investigations in the fields of curriculum methods, equipment, teaching aids, evaluation and related fields.

Examination Unit

The following orientation workshops were conducted by the Evaluation Officers of the Examination Unit during the quarter under report :

S.No.	*Place where workshop was conducted*	*Dates*	*Subject*
1.	Agra	July 13—20	English
2.	Baramati	July 7—11	Mathematics
3.	Baramati	July 7—11	Science
4.	Annamalainagar	July 1— 5	English
5.	Madras	July 6—10	English
6.	Lucknow	July 13—18	Mathematics and Science

7.	New Delhi	July 28—1st August	Mathematics
8.	New Delhi	July 28—1st August	English
9.	Bijapur	July 24—29	Mathematics
10.	Hubli	July 27—29	Mathematics
11.	Gulbarga	July 14—18	Science
12.	Dharwar	July 27—31	Science
13.	Perundurai	July 16—19	English
14.	Madurai	July 27—31	English
15.	Perundurai	July 16—19	Social Studies
16.	Barigah	July 21—25	Social Studies
17.	Tanjore	July 27—31	Social Studies
18.	Perundurai	July 16—19	Science
19.	Kozhikode	July 20—25	Science
20.	Moga/Ferozepore	July 18—23	Mathematics
21.	Ferozepore	July 24—29	Social Studies
22.	Ranchi	July 21—25	Science
23.	Surat	July 15—19	Science and Mathematics
24.	Bombay	July 20—25	Science and Mathematics
25.	Mehsana	July 27—31	Social Studies
26.	Allahabad	July 27—31	Hindi

The Examination Unit also compiled and analysed the data supplied by the Secretaries of Boards of Secondary Education, Head Examiners and Teachers in response to the questionnaire sent by the Directorate, in connection with their investigation of the problems connected with public examination at the secondary level.

Conferences and Meetings

The first meeting of the reconstituted All-India Council for Secondary Education was held on 27th July 1959 in Vigyan Bhavan, New Delhi. Dr. K.L. Shrimali, Union Minister of Education inaugurated the meeting which was presided over by Shri P.N. Kirpal, Chairman, All-India Council for Secondary Education.

The Third Conference of the Secretaries of Boards of Secondary Education in India was held in Vigyan Bhavan, New Delhi, on 21st and 22nd September, 1959. The Conference reviewed the progress so far made in examination reform, the programme of work for the future and the problem of examination failures.

T.C.M. Equipment

125 sets of books and 150 packages were despatched to various science clubs. Sixty five cases of books, 12 cases of Drill Press, laboratory apparatus and spare parts were received during this period.

Around the States

New Education Fellowship Tenth World Conference

THE Tenth World Conference of the New Education Fellowship is scheduled to be held in Delhi from 28th December, 1959 to 6th January 1960. The venue of the conference will be the Central Institute of Education, Probyn Road, Delhi-8.

The Conference will be attended by 600 participants drawn from all over the world including Europe and America. The main purpose of the conference is to provide an opportunity to teachers, educational administrators and parents to come together and discuss important educational problems of common interest.

After the main sessions, the conference will work through small discussion groups on various subjects. The working language will be English. The conference does not aim at arriving at some agreed "resolutions" on the subjects under discussion, but rather to stimulate forward thinking on vital issues and enable the members to make their best contribution to group thinking.

The major topics to be discussed at the conference are :

(i) The Gandhian Contribution to Education

Trainer Lecturer : Shri G. Ramachandran, Editor, *Gandhi Marg*

(ii) Philosophy and Practice of Teacher Education

Trainer-Lecturer : Prof. Ben Morris, University of Bristol Institution of Education

(iii) Administration, School Inspection and In-Service Education

Trainer-Lecturer : Mr. S. C. Mason, Director of Education, Leicestershire.

(iv) Education in Home and School for Full Responsible Living

Trainer-Lecturer : Professor Abdul Aziz El Koussy, Technical Adviser to the Ministry of Education, Egypt.

(v) The Place of the Sciences in Modern Education

Trainer-Lecturer : Professor J. A. Lauwerys, University of London Institute of Education.

(vi) The Contribution of the Arts in Modern Education.

Trainer-Lecturer : Dr. Mulk Raj Anand, Scholar and Author.

The Conference has set before it the following primary aims :

(1) to give members an opportunity of exchanging ideas and information in a stable group, so that some permanent friendships across national and other frontiers may be formed, and mutual appreciation of Eastern and Western cultural values enhanced ; (2) to demonstrate the value of small-group discussions as a teaching medium ; (3) to help forward the movement towards a more integrated curriculum in the training of teachers and in secondary education ; and (4) to promote a closer understanding between those engaged in the administration and practice of education.

The New Education Fellowship, which is

responsible for organising the Conference believes in a way of working which is valuable to teachers, highlighting for them the problems of staff relationships, of their real function as the leader of a group of children in the daily work in school and finally of the way in which, in a well-conducted school class, children can learn things from their contemporaries which even the best of teachers of the older kind could not teach them.

The small-group pattern of the Conference is meant to promote : (1) a reduction of tension and conflict ; (2) a reduction of inner resistance to understanding ; (3) a clearer comprehension of motives ; and (4) an enlargement of sympathy for the feelings, values, aspirations and difficulties of those of a different culture, coupled with a recognition that there can be radically different ways of looking at things.

Detailed information regarding the Conference can be obtained from Dr. E.A. Pires, Conference Secretary, Tenth World Conference, Central Institute of Education, 33-Probyn Road, Delhi-8.

A & N ISLANDS

THE separate Senior Basic school for girls started in November, 1958 was upgraded to a Higher Secondary school for girls from the commencement of the current academic year. This is the first Higher Secondary school for girls in these Islands.

To enable students to listen to radio programmes of educational value, a radio set has been provided to the Higher Secondary Multipurpose school and the Higher Secondary school for girls. Two other radio sets have been provided to the Junior Basic schools at Aberdeen and Haddo.

Seven graduate teachers have been recruited from the mainland to strengthen the staff of the Higher Secondary schools.

Construction of a new school building where the present Higher Secondary School for Girls will be shifted is in progress.

To open a junior Naval Wing of the N.C.C. a teacher was sent to Cochin for training. Further, to open a Girls Division of the N.C.C. a lady teacher has been sent to Kamptee for training. Two other Commissioned Officers of the Junior N.C.C. Troops (Army Wing) were sent to Kamptee to undergo training in order to replace the existing N.C.C. officers who are to retire this year.

Compulsory Education

A Regulation called the Andaman and Nicobar Islands (Primary Education) Regulation 3 of 1959 was promulgated with effect from 26th June, 1959. The important features of the Regulation are :

(i) Every child of school age residing within a specified area shall be required to attend the course of Primary education imparted at a recognised school ;

(ii) No fee for attending the course of primary education shall be levied at any recognised school ; and

(iii) The guardian of every child of school age shall cause such child to attend a recognised school unless there be a reasonable excuse for non-attendance.

DELHI

Secondary Education

THE Delhi Administration have opened 15 new Higher Secondary schools (9 for boys and 6 for girls) and upgraded 4 Government Middle schools to Higher Secondary standard with effect from 15th July, 1959 in order to provide admission for all the school-going children. As a result of opening and upgrading of these schools, additional schooling facilities have been provided to about 4000 students at the Higher Secondary stage. The Administration have also raised 20 Government High schools to Higher Secondary standard with the commencement of the current academic session. Of these 20, 14 Government schools will have facilities for science group, in addition to arts group.

The following Government and aided High/Higher Secondary schools have been converted into Multipurpose Higher Secondary schools with effect from 15th July, 1959.

1. Government High School, Najafgarh, Delhi.
2. Government Gandhi Memorial High School, Delhi-Shahdara.
3. Government Girls' High School, Kalkaji.
4. R.B. Ram Roop Vidya Mandir Higher Secondary School, Delhi.

These schools have facilities for the following optional groups.

(a) Humanities (b) Fine Arts (c) Commerce (d) Science (e) Home Science.

It is also proposed to convert the Municipal Girls' Higher Secondary School, Gole Market, into a Multipurpose Higher Secondary School this year.

Introduction of Educational and Vocational Guidance

The Educational and Vocational Guidance Units have been established in the following two Government Schools :

1. Government Model School, Ludlow Castle, Delhi.
2. B.R. Government Higher Secondary School, Delhi-Shahdara.

Development of Government Schools into Model Schools

It has been decided to develop 12 Government Higher Secondary Schools into Model Schools this year. These schools will serve as laboratories for educational experiments.

MADRAS

Secondary Education

SIXTY two Secondary schools (31 Aided and 31 District Board) were started from the session 1959-60.

School Improvement Conferences

Fifteen School Improvement Conferences were held in various districts of the State during the period 29th April to 17th September, 1959. The total number of schemes undertaken for execution in the conferences held till 17th September, 1959 comes to about 63,000 and their total value to Rs. 4.43 crores. The value of the collections received in cash and kind on the spot comes to about Rs. 1.34 crores. Particulars of the 15 conferences held during the period under review are given below :

S. No.	Date of the Conference	Place of the Conference	Value of the schemes undertaken for execution	Donations received on the spot in cash and kind
			Rs.	Rs.
1.	6-6 1959	Coimbatore	8,99,369	5,96,103
2.	17-6-1959	Tindivanam	8,10,769	4,36,311
3.	17-6-1959	Jayankondam	13,91,084	30,069
4.	26-6-1959	Dharapuram	5,95,044	29,698
5.	6-7-1959	Tirunelveli	8,09,132	53,252
6.	5-8-1959	Orathanad.	4,36,000	4,36,000
7.	6-8-1959	Srivaikundam (Sawyerpuram)	6,54,423	7,907
8.	10-8-1959	Arkonam	4,33,547	1,26,987
9.	16-8-1959	Namakkal (Velur)	16,00,000	7,28,000
10.	28-8-1959	Periyakulam	2,06,313	5,633
11.	14-9-1959	Thoppur	2,67,093	87,590
12.	15-9-1959	Harur	3,39,727	2,67,786
13.	16-9-1959	Tiruvannamalai	3,24,365	2,31,405
14.	16-9-1959	Polur	3,03,000	2,42,241
15.	17-9-1959	Arni	2,42,241	1,78,729

MANIPUR

A Basic Training Institute was started from 7th August, 1959 at Canchipur for 80 trainees. The special feature of this Institute is that the trainees themselves have constructed huts for their living. If the normal method of putting up buildings through the P.W.D. had been adopted, it would not have been possible to start the Institute this year. The trainees were supplied with materials only and they have constructed beautiful huts for themselves and in each hut 6 trainees are living at present. They have laid vegetable and flower gardens in front of the huts. It is proposed to start two more such Basic Training institutes next year in this territory.

Special attention has been paid from the beginning of the current session to introduce some of the important features of Basic education in non-Basic schools. In this connection one seminar of 86 Primary school teachers including members of the Inspecting staff was held in May, 1959. Other seminars will be held in the near future.

Two seminars were held in June, 1959 for teachers of Mathematics and English. These were attended by 245 teachers. The object of the seminars was to improve teaching methods in Secondary schools.

A midday tiffin scheme has also to be started from the beginning of the current session in 60 aided Primary schools with the help of local people.

ORISSA

Board of Secondary Education

AT the annual meeting of the Board held on 11th April last, 11 new schools were recognised. The total number of High schools now recognised by the Board is 269. Fifteen schools were permitted to open classes higher than class VIII.

During the quarter 26 refresher courses were arranged for teachers of Middle schools at 26 centres which were attended by about 550 teachers of Middle schools. These courses were held because the Board proposed to introduce the syllabus on the Structural pattern in classes VI, VII and VIII during the session 1959-60.

Pupils from 12 schools joined the excursion camp at Puri from 18th May to 24th May, 1959. All these pupils came from the interior districts like Kalahandi, Sundargarh, Sambalpur and Phulbani. It is proposed to hold a similar camp at Hirakud during the Christmas holidays in which students of coastal areas will participate.

RAJASTHAN

Reorganisation of Secondary Education

IN Rajasthan the pattern of Secondary education includes Intermediate colleges, (3 years' course) Multipurpose Higher Secondary schools, Higher Secondary Schools with Humanities and one more group of optionals (3 years' course), High schools (2 years' course) and Junior High schools or Middle schools with classes VI, VII, VIII after the Primary.

The Intermediate colleges are being rapidly upgraded to three-year Degree colleges. Only three Government and one private colleges which are still left will be upgraded in July 1960. In this way the pattern of Intermediate colleges will vanish in the last year of the Second Five-Year Plan.

Rajasthan has adopted the policy of upgrading all Middle schools for boys to Higher Secondary schools, and started 38 such institutions from the current session. In the case of girls' schools, High schools of 2 years' course after class VIII are being encouraged as these suit the conditions of this part of the country and keep girls in schools for a shorter period. There are 29 High schools for girls in the State at present of which two have been opened this year.

The State Government is not opening any new Multipurpose Higher Secondary schools but concentrating all efforts on strengthening

the existing 62 institutions. In each of the Multipurpose Higher Secondary schools at least three groups are provided for optionals besides the five compulsory subjects. The idea is to make provision for as many streams as is practicable in a particular locality.

People's Participation in Educational Development

There is a spurt among the masses in Rajasthan for education in general and particularly for the Higher Secondary system. Buildings have been constructed by the public in rural areas and the people have donated cash contributions towards buildings and equipment. In keeping with this popular enthusiasm the Government proposes to upgrade 50% of existing High schools (about 230) to Higher Secondary schools under the Third Five Year Plan and raise the status of about 40 Middle schools to Higher Secondary schools every year from 1960-61 onwards.

Recruitment and Training of Teachers

Recruitment of teachers for different subjects is conducted by direct recruitment through the Rajasthan Public Service Commission, as well as by departmental promotion. First and Second Class post-graduates with professional training are preferred. Considerable difficulty has been experienced in the State in attracting senior teachers for Agriculture and Physics and other Science subjects even though the grade of a Senior Teacher is Rs. 200-400. As a result candidates with a third division and with qualifications of training have been accepted for English also.

The demand of the courses in order of preference is—Science, Commerce and Agriculture. The reason perhaps is that avenues of employment and further studies after passing the 3-year course are greater in the first two fields than in Agriculture and pure Humanities.

As regards training in Rajasthan there is no adequate arrangement for the training of teachers belonging to the Secondary institutions. There are four colleges in which graduates are admitted for the Degree of Bachelor of Education. The intake of each college is 100. The number of untrained graduates and under-graduates is so great that these training institutions can not cope with the requirements. Therefore short-term training courses and seminars are organised from time to time. This year eight seminars are proposed to be organised for the purpose.

WEST BENGAL

Seminar of Headmasters of Higher Secondary Schools

A seminar of the Headmasters of High schools, specially of those High schools which have been upgraded, was held at Kelomal Siksha Sadan, in the district of Midnapore from the 28th June to 4th July, 1959. Forty five Headmasters attended. There were lively discussions and exchange of views between the Headmasters of different schools on the problems of upgraded schools. This seminar was sponsored by the State Government.

Short Course for Science Teachers

The State Government has prepared a Scheme of Short Course Contents Training for Science teachers of Multipurpose schools in three Government colleges. The participants in these courses are expected to reach the Honours' standard in one of the Science subjects. The participants have been selected from amongst the experienced trained graduates of the upgraded schools. The Course will last for six months and there will be two courses during the academic year. The Courses in Physics and Biology are to be held at the President College in Calcutta and the Course for Chemistry at the Krishnagar Government College, Nadia, and Hooghly Mohsin College, Hooghly. There is provision for the training of 85 teachers, all in one batch. The teachers draw their pay and an additional allowance of Rs. 50 p.m. if they are selected to stay at Krishnagar or Hooghly. The first batch started the course in the three colleges from August 17, 1959. The part-time services

(*Continued on page 72*)

Window on the World

AUSTRIA

THE French National Commission of Unesco has agreed to a proposal by the Austrian National Commission for a critical study of the history textbooks used in secondary school instruction in both countries that have bearing on the relationships between the two countries. A group of historians has been designated by the French National Commission to write their observations on the Austrian textbooks, while Austrian experts will examine the French textbooks.

In the first stage of the project, four points of the programme were agreed on as topics for the study : rivalry between the French royal house and the Habsburgs of Austria from 1526 onwards ; the Thirty Years' War ; conflicts with the French royal house under Louis XIV ; relationships between Austria and France in the eighteenth century. (Unesco News)

BULGARIA

The Children's Palace *by Darina Guerova*

FOR most people, the word "palace" conjures up an idea of pomp and ceremony. It is a place that you view from afar, or visit as a historic monument.

But for the young people of Sofia, Bulgaria, the word has a very different connotation. Their palace is certainly a splendid building, set in the middle of a large park of silver birch trees and pines, but is also a place which offers the most fascinating selection of activities they could possibly dream of.

About four thousand children and teen-agers register at the palace at the beginning of each school year. There they are taken in charge by a staff of trained specialists, educators and sports instructors. And they have at least fifty study groups or field activities from which to choose : science clubs, history debating societies, technical trades, agriculture and farm work, music clubs, choirs, arts and crafts, the theatre, and many others. All this in extremely comfortable surroundings, for the palace offers every facility for work and pleasure : laboratories, lecture and concert halls, workshops, and movie theatre, as well as playrooms and a real stage on which to act.

The science clubs are among the most popular with serious-minded lads, and the palace boasts of plenty of budding biologists, geographers, mathematicians and physicists.

The geographers in particular are kept very busy for in Bulgaria new towns and villages spring up almost overnight on the map. The boys and girls of the geography club want to know where they are located, what their inhabitants do for a living, what sort of factories are being built in the area, whether new road and rail networks are being constructed, and many other questions.

Their room is full of maps, charts and plans of all kinds.

The "historians" too have maps and charts, but of another sort, since they are not concerned with present-day conditions but with recording past events.

Down in the park, the young naturalists are busy installing nesting places for the birds they have learned about during the natural history class, while the young farmers are at work in the experimental fields and orchard where they grow wheat, barley, sunflowers, potatoes, tomatoes, peppers and fruit, or in the farmyard where they raise chickens, ducks, angora rabbits, doves and lambs.

In the workshops on the first floor radio and TV experts are engaged in setting up their ultra-modern equipment. It includes a real broadcasting station—LZIKBD—which maintains regular radio contacts with young radio fans all over Bulgaria and abroad.

Next door, the motor mechanics are busy repairing an engine. They know all there is to know about the inside of a car and are also expert drivers since they get plenty of practice on real cars and motor-bikes down in the park.

As for the scientists in the laboratory, they are engaged at present on a very important task : building instruments for school laboratories in different parts of Bulgaria.

You could go on almost indefinitely listing all the activities from which the children can choose : there is a film and photo club, and various "art" clubs where you can learn drawing, painting, sculpture, wood-carving, etc., and others which teach music, singing, ballet-dancing, and dramatic art.

These latter activities really come into their own in the evening when concerts are staged by the palace choir or by Vladi Simeonov's youth orchestra, and when the children's theatre opens its doors for a production of "Cinderella", "The Craftsmen's City" (by T. Gabbe), "The Snow Queen" or "The Spoilt Child" (by E. Armyanova). More than fifty shows have already been staged at the palace in addition to the plays produced by the puppet theatre which is also extremely popular.

(Unesco News)

CYPRUS

Rural Central Schools of Cyprus

ON June 14, 1958, the Department of Education announced its plan for the reorganisation and development of two Rural Central schools, at Morphou for the Greeks and at Pergamos for the Turks in order to raise the standard of education and expand the scope of the schools. The above two schools were established in 1941 and 1950 respectively. The pupils at Morphou were the sons of farmers, and entered the Rural Central School at the age of 14-16, after completing their elementary schooling. The 2-year course combined practical and theoretical training.

The reorganisation is designed to meet the needs of modern agriculture and the needs of Cyprus youth. Agriculture ranks first as a leading industry of the country, in which two-thirds of the population is employed. In order to increase production it was necessary to introduce better varieties of plants and animals, land reclamation, soil and water conservation. Much progress has been made in the exploitation of the land and the creation of large farms, tree plantations, dairy farms, poultry farms, etc A large import trade of fertilizers, feed mixtures, drugs and farm equipment has developed. All this requires educated technical personnel calling for more than merely an elementary education. Students need a general secondary education with emphasis on the science of agriculture, and on language as a tool subject as well as a cultural one. This type of education enables graduates of a Rural Central School to enter some other occupation if they do not wish to follow an agricultural career, or to plan to go on to a higher educational institution.

The Education Department has decided, as a first step, that their type of school shall take the form of a 3-year secondary school which will include the study of agriculture. Upon the completion of the 3-year course, pupils may continue their studies either in the Rural Central School or at some other educational institution. It is hoped that the life in the immediate environment of the school farms and the intensively agricultural areas of Morphou and Pergamos, as well as their daily contact with the farming activities going on around them, will create in them a love and respect for the agricultural profession. Students will generally be boarders. Both tuition and boarding fees are low. This should make the Rural Central School available to many children of the poorer farmers.

(Foreign Education Digest)

DENMARK

The International Exhibition of Teaching Materials in Copenhagen

THE first International School Exhibition, to be designated "School and Leisure", will be held in Copenhagen from October 17 to 26, 1959. It will give visitors the opportunity to trace the development of schools, from those of the 18th century up to the modern school. This, the first such international exhibition in Scandinavia, is being conducted by the Danish Federal Association of School Commissions under the patronage of the King of Denmark. It will contain exhibits of school conditions, teaching materials, etc., from 12 countries. Two schools adjoining the main civic exhibit hall have been placed at the disposal of the organizers of the exhibition to afford additional space for displays.

A number of pertinent educational lectures will be given at the Auditorium, as well as theatrical performances conducted by various schools, gymnastic exercises, folk dances, etc.

A special exhibit will present the development of the schools from 1720 to 1958. There will also be sport competitive events for young people.

(Foreign Education Digest)

FINLAND

International Conference on Sport and Education

MEMBERS of the teaching profession, physical training experts, officials, sociologists, representatives of workers' and employers' groups from a number of countries met in Helsinki from 10th to 16th August for a big international conference on 'Sport and Education' convened by the Government of Finland with assistance from Unesco. The 81 Member States of Unesco, international organisations and more than one hundred international sport federations were invited to send representatives to this meeting which dealt with the cultural, social and artistic aspects and implications of sport besides its purely physical aspects.

The three main items on the agenda related to sport as a means for improving working conditions, cultural development and broadening human relations.

An international competition of the best films on sport and physical education was also held during the conference as well as an exhibition of sports equipment and publications related to conference themes.

The guiding idea behind all these discussions was to draw the attention of educationists everywhere to the role of sport in shaping personality, and thus contribute to giving games and physical education the place they deserved in any modern system of education.

(Unesco News)

GERMANY

The School System in Berlin

THE Berlin school system consists of the public primary school and the general

secondary school. The primary school is compulsory for the first 6 years of schooling, with a standard, uniform curriculum for all pupils during the first 4 years, and with a differentiated specialized programme for the 5th and 6th years, with compulsory instruction in a modern language or Latin.

The general secondary school is based upon the primary (elementary) school and embraces 3 types of schools : the practical, the technical and the classical. The promotion of pupils to the various types of the secondary school is determined before the end of the sixth year of schooling. They are assigned to one of the types on a half-year probationary basis, during which time secondary school teachers must closely observe their progress and their fitness for the type of school to which they have been assigned. If the pupil does not fit into this first type he must be reassigned to another type at the end of the first semester. The school week, for all pupils, covers 32 hours of instruction.

The 3-year practical secondary school is not a vocational or a prevocational school. Foreign languages courses are compulsory. It provides a general education designed to develop a broad cultural basis for the future vocational education of the pupil. Vocational guidance is provided in the final year to help the pupil in his choice of vocation. Normally graduates of this practical school proceed to the 10th grade of the vocational school, where they enter upon their specific vocational training. Compulsory schooling covers 12 years (grades).

The secondary technical school courses cover 4 years (grades 7 to 10). They provide a general secondary education combined with technical education. In addition to the core subjects, there are 4 types of "group courses" which may be selected by the pupil : language ; business-commercial ; technical ; domestic science-nursing.

The classical secondary school (*gymnasium*) covers 7 years and is designed to prepare for university or higher education. It comprises 3 streams : classical ; modern language ; mathematics-science. Special schools include 70 types of schools for physically or mentally handicapped children.

Tuition and school materials are free in all Berlin schools.

Berlin comprises 12 districts and their schools are under the immediate jurisdiction of the school officials or the district officials. The head of the school department is nominated by the district department, his nomination is confirmed by the Senator for Public Education, and he is appointed by the district department. In each district there are from two to four district school boards (depending upon the size of the district) who have charge of school supervision. Their functions include the supervision of the instruction given in the schools; the professional training of the teachers ; inspection of teaching procedures ; conducting conference of school staff ; setting the requirements for the supplementary training of teachers (in so far as this function is not the prerogative of the Senator for Public Education) ; supervision of private schools ; allocation of pupils to special schools ; etc.

In cooperation with the district municipal boards of public education, the district school boards carry out the following duties : deal with matters pertaining to parent committees and school organisations ; assignment of teachers to the various schools ; and special leaves of absence for teachers.

Parent participation in school affairs is well organised in Berlin, and is prescribed in the school laws. At meetings of the class parent associations, teachers and parents' representatives discuss matters dealing with school procedures and policies, teaching methods and other pertinent questions, and such community activities as parents' evenings, class vacations, and the organisation of school trips. Parents are urged to visit the school, and the teachers to visit the homes of their pupils.

The parent association of a school class elects a parent representative, and these representatives jointly constitute the present association of a school. This latter associa-

tion elects a chairman and determines its own order of business. The chief functions of this association are to give strong support to the school's endeavour to fulfill its duties, and to help resolve problems affecting both home and school. The ties between school and parents are strengthened through parent participation in such school activities as vacation games, school trips, visits to school-country-homes, vocational guidance, school exhibitions, and school sports festivals.

In order to ensure that the school keeps pace with modern demands, provision is made for the establishment of experimental schools to try out new principles and methods ; only those pupils whose parents have given their unqualified consent, are to be assigned to these schools.

The Educational Advisory Council is composed of a Senate representative, who serves as chairman, and of representatives of the public, of parents, teachers, bodies interested in educational matters, and of trade unions. This advisory council participates in the consideration of general educational problems, problems of school development, school experiments, and of schools of a special type. It consists of 26 members, appointed by the Senate : 6 parent representatives ; 4 teacher representatives ; 7 representatives of the public ; 4 union representatives: 4 members representing groups interested in education, such as religious groups and those interested in world affairs. The members serve 4 years. Each member receives an attendance fee for every meeting attended. Meetings are held at least every two months.

(Foreign Education Digest)

PANAMA

The School Center at Capira (A Pilot Project)

THE aim of this pilot project is to organize the rural and semi-urban schools in such a manner that they will fulfill the two-fold purpose of educating children and at the same time serving to improve the living conditions in the homes and in the community.

The Center comprises 8 schools with a total of 39 classrooms. Each school is in charge of a Director who also serves as the supervisor of the Center as a whole. Other staff officers include a teacher of agriculture and a woman educator for service in the homes. The agriculture instructor helps the various grade teachers in connection with the teaching of agriculture, home gardening activities and the care of domestic animals. The woman teacher deals with problems connected with improving home conditions in the community.

The city purchased some 20 hectares of land to serve as a site for the Center. Each constituent school of the Center assumes the responsibility for the cultivation of its own particular plot of ground, an activity in which the grade teachers, pupils, and adults of the community participate, under the supervision of the agriculture teacher. The participants derive from this work practical experience in farm work, and technical skills which can be applied to the cultivation of the school gardens, home gardens and their own small farms.

The aims of this farm center are :

(a) to serve as a practical training center for grade teachers who teach agriculture ;

(b) to serve as a center where small groups of farmers, under the supervision of the agriculture teacher, can carry out experiments to try out methods which they can later apply to their own small farms for the purpose of diversifying and increasing their crops ;

(c) to serve as a center where teachers, parents and pupils, as cooperative working groups, can cultivate garden plots for producing food to be used in the school kitchens.

In short, the farm is to serve as a center for teaching agriculture to teachers, pupils and local adults. It represents one of the many means which the school and other agencies can employ to help the community to raise its standard of living.

(Foreign Education Digest)

YUGOSLAVIA

Schools for Parents

THE member societies of the Council of Association for Child Welfare are actively concerned with parent education. In some areas this activity takes the form of lectures. In others there are permanent courses, which have grown into schools for parents.

In 1956 more than 40,000 parents attended the lectures and seminaries. Enrolment in the schools for parents ranges from 30 to 70 according to the area. The work generally deals systematically with the most important problems regarding children and is illustrated by films, literature, discussions, etc. For the time being these schools are established in localities where the necessary teaching staff is available. One of the most important features of this work is to find and prepare staff for this type of work.

Publications, films and broadcasts for parents have proved very effective in dealing with domestic problems including sex education and the psychology of children and youth. The press is fulfilling an important function in this work, some of them having special columns dealing with these problems.

Special publication to help parents and social workers are issued in the various republics : "Young People" in Slovenia, "The Parent" in Serkia, "Family and Child" in Bosvia.

(Foreign Education Digest)

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(*Continued from page 66*)

of the three colleges concerned are being utilised for the purpose of teaching.

West Bengal Teachers' Association Annual Meet

The Fifth Annual General Meeting of the West Bengal Teachers' Association was held at Bhatpara Multipurpose School, 24 Parganas, on 27th June, 1959. Attended by 600 delegates, the meeting discussed various problems of educational development in West Bengal. In all the speeches of various educationists made on the occasion there was particular emphasis on the need for the introduction of moral education in schools and the teaching of Sanskrit as a compulsory subject.

Purposeful Education by George P. Kellaway ; Publishers : University of London Press Ltd., London ; Price 6s.

IT is refreshing to have a book on the principles and philosophy of education written in the context of countries where educational development on a large scale is a growth of recent times. The book gives a readable discussion of present day trends in education, many of which have become matters of controversy. Chief among these is the question of the place of interest and activity in education. In his treatment of the subject, the author recognises the importance of interest as a factor in the process of learning but warns that "unduly stressed, its total effect can be harmful". The momentum of initial interest must lead to the development of a sense of purpose, realisation of the worthwhileness of an act which would imply a deeper and more lasting interest in the act. It is only with such a sense of purpose that strenuous efforts will be willingly put forth by the child to achieve the thoroughness demanded by the work in hand. There will not then be the constant demand for spectacular novelty. As regards the place of activity and activity methods, the author holds that when secondary education is becoming universal these become essential. 'Reposeful study' in the pursuit of knowledge for its own sake and the consequent compartmentalisation of knowledge may suit the highly intellectual type of children but for the vast majority it is only the pursuit of an activity that will harness their energies and give a unity and wholeness to education. Such activities can be integrated into a complete school course. These as well as other views that the author has expounded on discipline, rewards and punishments, the home and the school, emerge naturally from the author's fundamental belief that the right attitude to work is the basis of the healthy development of the individual as well as of society. This has become difficult in these days of mechanisation when very few workers can get creative satisfaction out of their work and when work in the production of the essential commodities and services has come to be looked upon as undignified and menial. All the more urgent, therefore, is the need to realise that a healthy attitude to all kinds of purposeful work is something quite fundamental in children's education.

The author has done right to point out that many an accepted educational theory becomes inapplicable in practice owing to financial and administrative reasons. Thus it is agreed on all hands that education must be child-centred, but the individual approach it implies becomes impossible when there is stringent financial control and inadequacy of teachers, premises and equipment as happens in many of the countries now developing rapidly.

The author urges such countries to be particularly watchful and see that on the one hand "they do not merely imitate in a mechanical way the patterns produced by other civilisations and on the other hand, that in seeking something appropriate to their distinctive situations they do not abandon standards which are so difficult to achieve and yet so easy to lose."

S. Panandikar*

* Director, Directorate of Extension Programmes for Secondary Education, New Delhi.

Aspects of Education in India and Abroad by Austin A. D'Souza ; Published by Orient Longmans, Calcutta, 1958 ; pp. 220. Price Rs. 6.25 n.p.

THE present volume is a collection of essays written in non-technical language and addressed to experts and laymen alike. The author hopes that the discussions in this book will stimulate critical thinking among his readers about the significant aspects of education in this country.

The topics included cover a wide range of subjects. The discussion starts with the ideas on planning and extends to the various stages of education viz., nursery, infant, junior, primary, secondary and adult education. Although university education does not find a place in the present set of essays, two chapters are devoted to the discussion of the problems of technical education. Other subjects touched upon are rural education and education for international understanding.

From what has been stated above it is clear that the author has attempted to tackle too many problems in a brief compass. From the reader's point of view it would have been better if fewer topics were dealt with more fully. The author could, for instance, retain the first eleven chapters as one unit and expand the arguments with special reference to the needs and problems of secondary education. The remaining chapters could easily form the basis of another volume.

Although the author has tried to explain why he could not deal with Basic education adequately, I feel that no discussion on Primary education can be helpful unless it is reinforced by a proper understanding of Basic education, especially the problem of orientation of Primary schools. The States have accepted the Basic pattern and yet nothing has been done so far to relate it to other parts of the educational ladder. Even the Mudaliar Report which is an excellent educational document could not give a lead in this matter.

The author has drawn everybody's attention not only to the importance of educational planning but also to the need of consciously fixing priorities. The planners have to give priority to those aspects of education which facilitate the functioning of our democracy and promote the economic growth of the community. It is also necessary to keep an eye on the backward areas of the country which may need special treatment.

The three essays dealing with secondary education are among the best in the volume. The author has discussed briefly the recommendations of the Secondary Education Commission. He has also mentioned the U.P. scheme of streaming students in the last two classes of the secondary school. This scheme sought to remedy one of the major ills of our system. When all pupils have to follow the same cademic subjects the results cannot be very satisfactory. This has been observed in the large-scale failures in the School Leaving examinations all over the country. The U.P. scheme required the students to choose one of the four types of curriculum : literary, scientific, artistic and constructive. This scheme was not entirely successful partly because proper guidance services were not available in the schools and partly because the parents preferred the first two courses rather than the last two.

The idea of multipurpose school has caught the imagination of many ; but there is a lot to learn from the U.P. example. Although there would be many courses available in the school, how should the students be guided ? It is essential that very efficient guidance services should be made available to the students. Even when such services are properly organised it may be difficult to convince some parents that a particular course is not suitable for their children. This is not the only problem—there are many others. The author, therefore, suggests that multipurpose education should be considered on an experimental basis. A small number of schools in selected areas should be allowed to function on these lines aided by research and expert advice. The scheme should be extended to other schools later on. There is considerable force in this argument. It

is obvious that the experience gained in the pilot project would help us in solving many problems.

In all his discussions the author has displayed a sense of realism. He knows the limitations of the system in which he works. He realises that educational improvement is possible mainly through the efforts of the teacher. The teacher should not only have a better status but also should be given all opportunity to grow professionally. A start has been made in this respect by the Extension Services Programmes and I feel optimistic about the outcome.

There are three essays dealing with education in Denmark. They are mainly concerned with adult education and give a vivid picture of this aspect of Danish education for which Denmark is justly famous.

In dealing with the problems of technical education the author has emphasised the need of making technical education an integral part of the entire educational pattern of a community. In the present state of affairs "the old divorce between a liberal and technical education can no longer exist." The author has also realised that our educational objectives should be reformulated so that international understanding becomes a reality. This theme he elaborates in the last two chapters.

Aspects of Education in India and Abroad justifies its title. The author has made use of his experience in England, U.S.A. and Denmark in discussing problems connected with various phases of education. His arguments are clear and convincing and yet his language is free from the 'jargon' usually found in educational treatises. The reader may not agree with some of the viewpoints expressed but surely the author's aim of "stimulating the critical thinking among experts and laymen alike" has been achieved to a great extent. The tone of sincerity is discernible throughout the volume.

A book of this type should have a bibliography and an index.

P. K. Roy*

*Lecturer, Central Institute of Education, Delhi.

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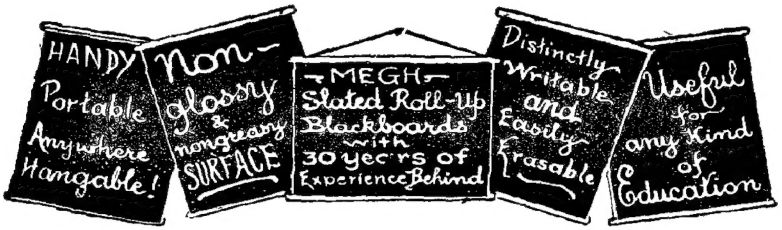

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